THE

VALLEY FARMER.

Devoted to the Interests of the Cultivators of the Soil in the Mississippi Valley.

VOL. II. ST. LOUIS, JULY, 1850. NO. 7.

THE VALLEY FARMER

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ADVERTISING.—The outside pages of the Valley Farmer are appropriated to advertisements, which will be inserted at the following rates:—One square of 12 lines, first insertion $1, subsequent insertions, 50 cents each. Cards of six lines or less inserted for $4 a year.

The Harvest, Crops, &c

From all parts of the country we hear reports of an abundant wheat harvest; probably the largest ever gathered in. Such lots as have already found their way to market, are represented as of a superior quality; the berry plump and uniform and fully up to standard weight. Our exchanges every where, with a very few exceptions of limited extent, speak of the yield as uncommonly large, and the quantity of land sown as much greater than usual. In this state of things, then, we suppose it is correct to estimate the yield of 1850 at from a fourth a third more than an average crop. If this be so, prices will undoubtedly rule low, especially as there is not much prospect of any considerable foreign demand. Such intelligence cannot but be cheering to the mechanics and laboring men—the consumers of the land—while the farmers, the producers, will be more than indemnified in the abundance of the crop, for any diminution in prices. Surely, then, all classes should be thankful to the "God of the Harvest," for his bountiful supplies.

The Hay crop is also uncommonly large. In this vicinity it has never been excelled.

Oats in some sections have been very seriously affected by the drought which prevailed during the month of June. In our immediate neighborhood they are hardly worth cutting, and such is the case in many sections east and south of us. From the regions north and west, however, we learn better things.

Corn, at this time, looks promising, though backward, and in some sections affected by the droughth of last month. Much of the corn planted, in consequence of the backwardness of the season at planting time, failed to come up, and the ground has been subsequently occupied with other crops. The favorable weather since that time, in those sections that have been blessed with genial rains, has brought it rapidly forward, and we judge that taking the country through, there will be at least an average crop.

As to Fruit, we are happy to learn that the fears entertained in the early part of the season, of its being cut off by the late frosts have been, except in some circumscribed locations, groundless. At this time, there is a fair prospect of a reasonable supply, particularly of the later varieties of apples, pears, peaches, &c.

Potatoes, in this vicinity, are literally "small, and few in a hill." We have not had any opportunity to learn particulars about the matter, as our correspondents and exchanges do not say much about it, still we presume there will be a tolerable crop, should there be sufficient rain the remainder of the season.

The Tobacco crop is unpromising, and will fal short of an average crop. Hemp looks well.

For the Valley Farmer.

To the Fruit Growers of Missouri.

Chrystal Springs, }
St. Louis, July 8, 1850. }

As one of the Delegates of the St. Louis Horticultural Society, and also as chairman of the State Fruit Committtee appointed by the National Pomological Congress, and also, as one of the Committee appointed by the Ohio State Board of Agriculture to award premiums on fruits and grapes, I propose to attend the Ohio State Agricultural Fair, and the National Pomological Convention, to be held at Cincinnati on the 11th, 12th and 13th days of September next.

It will give me great pleasure to bear a good report from the State of Missouri. In aid of such purpose, I shall be glad to receive communications from any part of the State relative to progress or discoveries made in fruit culture, or in the management of vineyards and the manufacture of wine. I will also, very cheerfully, give the proper direction to any specimen of fruit or wine, which may be considered worthy of being forwarded for exhibition or competition. All such specimens should be in this city by the 5th or 6th of September.

It will be a novel and interesting spectacle to see the productions of Missouri compared, side by side, with those of the eastern and middle States. These comparisons will also be useful in showing the effects of climate upon fruits of the same name and family, and aid in correcting and establishing a general system of nomenclature for all parts of the country.

Very respectfully,
Your obedient servant,
THOS. ALLEN.

———o———

Spring Garden Grove, }
Lee county, Iowa. }

To the Editor of the Valley Farmer:

My Dear Friend,—I had come to the conclusion that I had entirely lost the benefit of your interesting publication, the Valley Farmer, not receiving any from you in more than six months, until very recently some half a dozen came to hand all at once. I am however very disagreeably disappointed to think that I have once more heard from you, so that I may have some correspondence with you again. All farmers, stock growers, mail contractors, stage drivers, mechanics, millers, and men in any kind of public business ought to subscribe for your paper without delay, for the benefit of their children as well as for the important information to be obtained from its perusal. It is worth more to my children every year than a quarter's schooling, and will be to every one who takes it.

I have been experimenting for some time on the right manner of producing garden seeds, and I think I have nearly perfected a system, which I have not until now had an opportunity of publishing in your valuable paper.

Trim cabbage stalks and other vegetables that are set for the purpose of obtaining seed, more than one half off after all the branches have shot forth, and you will have fine plump seed that will not fail to come, and when they come they come, not weak, spindling, sickly things, as though they had the congestive chills for six months, or the epidemic.

Parsnips are a root which require particular training. Go to you seed persnips immediately on the receipt of this, and examine the branches. You will see at once those that require to be cast off to make the rest mature, and so on to all other of your roots growing for seed.

I think I am entirely master of the potato rot, although I have seen the insect this spring enter the vine about four inches from the ground, when the tops were not more than six or reven inches high. They take down the heart of the stock, beneath the surface, but do but little injury for some time; therefore I plant very early, as early as the earth will admit; cover them deep enough to be out of danger from the frost. Dig them before the vines are dead, or as soon as the skin is fast, or the potato matured. Hoe or shovel up some earth in a ring, say ten inches high, to keep the potatoes from running off. Pile your potatoes in these rings as you dig them to a point, and then cover them well with straw to keep them dry and protect them from the sun and air. Enough air will be admitted by the straw to preserve them in a healthy condition until fall, then bury them, and you will have good sound potatoes in the spring, and of the very best quality.

If the bugs should get on your vines, as soon as you discover them go early in the morning, as soon as the dew is on the vines, and sift or sprinkle air slacked lime over them, and the bugs will absquatulate immediately, and your potatoes will receive all the benefit of your labor and expense in liming. Green hickory wood ashes are a very good substitute for lime.

Culture of Sweet Potatoes.—Plow your ground deep, dig out with a large hoe some six inches deep and sixteen inches across, in the shape of grandmother's old cherry pie dish, three feet apart; then put in the best manure you have—lime and ashes compost is the best—place it round in pie dish form, haul the earth over with the hoe, taking care not to disturb the manure, to the hight of six inches; now take the handle of your hoe and sink it in the centre of your manure for to put in your sprout. One alone with fibre roots is sufficient. With your finger place the fibre roots nearly to the manure. Be careful in putting in to draw up gently the sprout and not press down the earth too hard. Have your hills made some three weeks before you want to put in the

sprouts, and if it should be dry, put one pint of water in each hill before the sprout is placed, and there is no danger. When the weeds begin to grow, take your hoe and shave down around the hill, the first time; when they grow again, hoe up well and cover them. The work is then done. If the vines have commenced running, twist them round on the top of the bowl before hoeing, or twice after, to prevent the vines from taking root; and it shades the earth on the top so as to keep it moist, and as the dew falls it drops immediately into the roots. The roots never go through the manure placed in the above described manner, but grow large and chunky and in a bunch like a nest of eggs. They are much easier dug and no small potatoes.

Well, but says my neighbor, how are we to obtain seed for the next year? Take the smallest size out, and you have the right kind to raise large fine potatoes, and not roots a foot long and as thick as your finger. Go according to these directions, and I will guarantee the best crops you have ever raised.

ABNER ROGERS.

Plain Truths well Told.

The Water Cure Journal for July comes to us as usual filled with interesting matter. Right valiently does it battle against many of the absurd notions of the times. We extract from its pages the following paragraphs:

Beef against Potatoes.—The Mirror thus replies to a vegetarian who believes it is *not* good to eat animal food:—

"The children of the English nobility are the children of the most inordinate flesh-eaters in Christendom; there is but little difference, we are told, between the diet of the young princes and young peasants in England, but oh! the difference when they grow up! The grown-up peasant lives all his life almost entirely on vegetable diet, while the nobleman eats flesh, 'and they acquire a stamina which makes them so fine a race.' All the American travelers in England have commented on the palpable physical superiority of the upper classes of England to the porridge-eating peasant. The matter could not be put in a stronger light than contrasting a beef-eating English landlord with a potato-eating Irish peasant."

The above is a fair sample of the most unfair method of reasoning with which this subject is usually treated. The writer tells us to compare a beef-eating nobleman, who lives in a large, commodious house, surrounded by parks and fountains, and having at command all the means of healthful exercise, and healthful rest, and healthful food in the matters of healthful fruits and vegetables, with a beggarly peasant who lives in a mud-shanty, has not wherewithal to wear clean clothes, who has no knowledge of hygienic agencies, yet who eats whatever of animal or vegetable food he can lay hands on, which from mere poverty is mainly limited to porridge and potatoes, and not half enough of them. The only proper standard of comparison is a beef-eating English nobleman with a potato-eating English nobleman; and a beef-eating Irish peasant with a potato-eating Irish peasant. Then a very different result would be obtained.

Summer Diseases.—As new fruits and vegetables bogin to fill our markets, bowel complaints, especially among children, increase. As this has always been the case, the doctors have traced, and the public has believed that there is a necessary connection between new fruits and vegetables and bowel complaints; and the doctors have generally contented themselves with doctoring the bowels and condemning the fruits and vegetables, without enlightening the public understanding in the matter at all. Now there is a considerable class of our community who, children and adults, use fruits and vegetables freely at all seasons, and never have any bowel complaints at all worth mentioning. How are these things to be accounted for? In this way: The latter class are careful always to select good, well-grown and well-ripened articles. The former look at the effect of half-grown and unripe articles, and sum-summarily condemn the whole vegetable kingdom. Mistaking the abuse for the nature of vegetation, they recommend more concentrated, and more animal, and more farinaceous food at the very season when nature and instinct both point us to the exact contrary conduct. We hold a free use of *good* fruits and vegetables absolutely essential to the best sanitary condition of the body in warm weather. We defy the whole "fish, flesh, and fowl" race of medical gentlemen, and the whole superfine flour, anti-apple, anti-squash, and anti-potato class of people to prove to us one single case of serious bowel complaint in persons whose whole food consisted of good fruits and vegetables and unconcentrated farinaceous food, provided their general habits were healthful in other respects.

Purely Vegetable.—"My dear sir," said a vegetable doctor to his patron, whom on entering the house he was surprised to find a widower, "did your wife suffer much in the last struggle?"

"No, I rather guess not," said the bereaved husband, with apparent resignation.

"Thank heaven!" exclaimed the botanic, "for the light which science imparts," throwing back his head and turning his eyes towards the concave horizon, and at the same time thrusting his hands into his breeches pockets; "this is truly an age of discoveries! I knew she could not suffer; for I had given her the proper remedies to make her *die easy*. I always do that for my patients. It is a discovery of my own—it is purely vegetable!"

HORSE POWERS.

We have herotofore called attention to the superior Horse Powers and Threshers manufactured by Messrs. Wheeler, Melick & Co., of Albany. This firm have this season established a branch establishment at Chicago, from whence we are prepared to order any description of machine at short notice.

Above we present a cut of the one horse machine, with thresher in operation. The one horse power thresher is peculiarly adapted to the use of such farmers as have ample barn room, and choose to get out their wheat and oats at odd jobs when the weather does not admit of out-door operations. It occupies no more room, when not in use than a common wagon. But, besides its value as a thresher, this power is one of the very best for any purpose to which it is desirable to attach a moderate power.

For the running of circular saws, corn-shellers, cob-crushers, bark mills, spice mills, turning lathes, printing presses, or any other machinery of the kind, we do not know of any apparatus so cheap, simple, and convenient.

With one of these powers and an apparatus for sawing wood, the whole of which could be drawn about by the horse that moved the power when in use, a man could saw as much wood in a day as several men could saw in the ordinary manner.

There are many kinds of work on the farm to which power might be profitably applied, and an ingenious farmer would often put it in requisition, if he had it at hand. He could cut his fodder for his stock, shell his corn, turn his grindstone, saw his wood, and rails, and posts. Get out his lumber for gates and paling fences, bore mortice holes in his fenee posts, prepare his timber for repairs about his buildings. pump his watea, if necessary,—his wife could churn her butter, etc.

We hope to see many of these machines in use by our farmers. They are offered by the proprietors on terms that cannot fail to be satisfactory to purchasers, and warranted to fulfill all that is promised for them.

The one horse power is used in many places in the country for running printing presses, and found to succeed admirably. One horse will turn two large presses with speed and regularity and at less expense than any other power. It would occupy less space than a steam engine, and be much less liable to get out of repair.

From the Granite Farmer.

AGRICULTURAL RESOURCES OF CALIFORNIA.

Much has already been said of Alta California as an agricultural country, and so contrardictory have been the views of different travelers, that oue at the present time, feels no little embarrassment in attempting to give an opiuion on the subject.

There seems to be a disposition of late to undervalue that country in regard to its agricultural prospects, in statements deviating nearly as far as from the truth, as did the former accounts in its exaggeration. Many persons have returned from California who are unwilling to admit that any part of the country is of the least value to cultivate, while others would have had us believe it not much inferior to the ancient garden of Eden. The mean between these two extremes is not the true state of the case. The later diminutive reports are certainly nearer the truth, than the previous ones, but by far too summary. They condemn the whole when certain parts should be excepted.

The western declivity of the coast range of hills

all the way from San Diego to Oregon is perfectly barren. The cold wind that blows continually from the north west would not permit a vegeatable of any kind to live here, were the soil ever so rich. On the eastern side of these hills, which in some places are vesy slightly wooded by a few scattering red wood and oak trees, we find a light crop of wild oats, which ripen early in the spring and remain dry and in good condition, for the sustenance of the numerous herds of cattle that are roaming over this region. As there is no rain or dew in this country from the close of the rainy season in March, until winter, the wild oats and grass dry up and remain in as good conditionfor the food of these animals, as if in barns, with the only exception of what effect the scorching influence of the sun's rays may produce uponthem. The grass and wild oats ripen in May and by the middle of June there is not a green thing on these hills, and in fact throughout most of the country. When the rains commence in November or December, the hills and dales soon begin to show signs of returning verdure, and by the time the old crop of dryed feed is destroyed by the rain, the new one is large enough to sustain the animals.

It is regretted by most persons that there is no dew in California. The writer is of the opinion, that the absence of dew is a blessing, for with no rain and only such dews as we have in the United States, this dry crop of grass and oats, would go to decay early in the summer, and the cattle and horses starve long before winter. It should be remembered that the heat of the sun is considerably greater than in this country and that the hot weather continues much longer. March in California corresponds with our May, and October with our August. East of the coast range and occupying the whole space between these hills and the Sierra Nevada mountains,is one extensive plain. This vast tract of country has considerable variety of soil and surface. Along the rivers are extensive marshes or swamps, which in the rainy season are covered more with water, but become dry in summer. These swamps which are of great extent, are covered with a tall, rank growth of a flag-like weed, and look very unpromising, though many of our southern planters are of the opinion, that they will at some future time make valuable fields for the culture of rice. Much of this plain is dry land, having a good depth of soil and covered with grass resembling white top, and scattering oaks of such size and height as to give it the appearance of an old New England orchard. The trees belong to a variety of the live oak, having a very narrow, and finely serated leaf and bearing acorns in great abundance. Some parts of this vast plain are barren, bearing little or no grass and no trees for many miles. This whole region, excepting the swamps, suffers exceedingly from the long drought of the summer, and for many miles in some parts not a drop of water is found from May until December.

With regard to the agricultural prospects of this plain, including the whole range and lower grade of hills forming the base of the Sierra Nevada mountains, we may come to the following conclusion.

That on all those parts which are not inundated during the winter and have a sufficient depth of soil, a crop of wheat may be raised. It should be sowed about the first of November, and the mildness of the winter will so far favor its growth as to enable it to ripen in the spring, before the drought is sufficiently severe to injure it. Oats are indigenous to this country and no doubt can be cultivated to good advantage. Turnips would grow finely during the winter, but most garden vegetables would require irrigation. Indian corn and potatoes can never be produced in California to any great amount without artificial watering, and this can very seldom be done on the plain of which I am now speaking, for obvious reasons. Along some of the large streams, the grass continues green through the summer. These places are not plenty and will be very valuable hereafter.

The gold region which extends from the eastern margin of this plain to the snow capped peaks of the Sierra Nevada mountains, and from the latitude of Monterey on the south, to Oregon on the north, in an agricultural point of view is nearly useles. The whole is mountainous, having a scattering growth of pine and oak trees. Here are found several varieties of the oak, one of which produces a quality of acorns superior to any in our country, and which makes the principal article of food for the native tribes of Indians. One variety of the oak is evergreen, is a very beautiful tree in winter. The two great rivers of Alta California, viz: the Sacramento and San Joaquin, with all their tributaries, arise in this region. The branches of these rivers are numerous—many of them large, rapid and in winter formidable streams. In summer thousands of them dry up, tending greatly to facilitate the operations of the gold digger.

The soil on these hills is light, and in many places gravelly. The whole region resembles an old pasture with scattering trees, The timber which in some lacalities, is abundant may be of great value at some future time.

W. W. BROWN.

FARMERS, MAKE YOUR OWN CANDLES.—Take twelve pounds [ounces?] of alum for every ten pounds of tallow, dissolve it in water before the tallow is put in, and then melt the tallow in the alum water, with frequent stirring, and it will clarify and harden the tallow, so as to make a most beautiful article, for either summer or winter use, almost as good as sperm. If the wick be dipt in spirits of turpentine, the candles will reflect a much more brilliant light.—[Am. Farmer.

From the Plow, Loom and Anvil.

SALT—ITS USE RECOMMENDED IN CURING TOBACCO.

Mr. John S. Skinner:

Dear Sir,—Thinking that an experiment of curing tobacco with salt might not be unacceptable to you inasmuch as it would possibly interest some of your readers who are engaged in its culture, I will endeavor to describe it.

All agriculturists know that to place vegetable matter in such a condition as to prevent speedy decay, it is neccessary to dry it: salt having a powerful attraction for water seemed to me applicable for that purpose to a plant so abundant of water as tobacco, and from the size of the stem so much more difficult to cure than the ordinary plants of the farm.

I felt disposed however, to try it first on that of the indifferent quality, in order that the loss might be small if the experiment failed. In 1846, a very wet year with us, I had some tobacco growing on a flat piece of land which suffered exceedingly from repeated and heavy rains; and as it was certain, if cured in the ordinary way, by fire, it would furnish only indifferent lugs, I resolved to try it with salt. It was cut; put on sticks, and hung on a scaffold near the curing house. A few days after it was taken, laid on the grass, and salt from a sifter applied, first on one side, then on the other, to as great an extent as would adhere. The tobacco was then hung on the tier-poles in the house, to the amount of six hundred sticks, being as much as the house would hold, and more than would have been placed there if the fire had been intended as the curing agent. In a short time after the salting drops of water appeared on the stalks, stems, and leaves of the tobacco, and a few hours after it was hung in the house the water commenced falling on the floor. The dripping continued several days, and the ground below was kept as wet as it would have been by a light shower of rain.

After the dripping ceased the tobacco began to dry, and as soon cured, nothing more being done. Not a leaf was lost by house burning, i. e. decay. The following winter it was stripped and bulked, and in the spring pressed (or prised, as the planters [properly] express it) for market. At that time it possessed a fragrance far beyond tobacco cured by fire, and always was more moist and flexable than the fire-cured. The hogshead that contained it was sent to Richmond, with the residue of my crop, in the spring of 1847, it being my intention to ship the salt cured to England. At Richmond it was refused by the inspectors for being too moist. The succeeding fall it was shipped to a house in Liverpool to which I had previously shipped some tobacco of far better original quality. Tobacco being very low in England at that time, the house was instructed not to press it on the market. It arrived in England "in good condition, free from mould," according to the statement of the English merchant. From circumstances unnecessary to detail here, it was not sold till February, 1849, two years after it had been placed in the warehouse at Liverpool. From the account of sale now before me it sold for 3 1-4d sterling per pound. Two other hogsheads of tobacco of superior quality cured by fire, sold at the same time, one for the same price, viz: 3 1-4 sterling per pound, the other at 3 3-4.

In order to test the matter still further I obtained the favor of an eminent manufacturer of tobacbo at Lynchburg to make some experiments with a portion of it, to ascertain its capacity of resisting putrefaction. His letter to me of August, 1847, says: "The parcel of tobacco I have had manufactured. The condition of it was very good. It was not manufactured until twelve or fifteen days ago, for the reason that I wanted to see how it would stand with the stem in. It made no difference in it. In my next sweating I will carry it through the regular process, and then let it stand for some time. I have no doubt it will answer very well, and that next summer it will go through a natural sweat with perfect safety." I did so, and I have now a box of it (1850,) opened a few days since, but tasting slightly of salt.

Inferior tobacco cured in this manner, I think would answer well for German markets, where salt is extensively used in the manufacture of snuff, as stated by the select committee of the House of Representatives in their report of July 25, 1848, in which they quote from the report of Joshua Dodge, appointed as special tobacco agent by the President, and sent to various states of Germany (see National Intelligencer, July 19, 1849.)

Great loss has been sustained by tobacco becoming purtrescent, either during the voyage, or in the European warehouses. That I think might be avoided by curing with salt. The risk, too, of curing by fire will be obviated, and the constant vigilance indispensible where that agent is used, would be no longer necessary. The expense of the salt is not as great as the wood, where that article is inconvenient, and the attendance of a hand to watch the fire. And there can be no objection, on the score of flavor, in curing tobacco with salt when it is destined for markets where salt is used in its manufacture

Yours respectfully,

T. Massie.

Tye-River Mills, Nelson, Va. April 17. 1850.

NOTES BY THE EDITOR.

We take pleasure in giving place to communications such as the preceeding, because they serve to exhibit something new in the way of agricultural practice and inquiry. For ourselves we have sometimes said, and oftener thought that there is no branch of agricultureal industry more susceptable of being being benefited by scientific investigation and practical experiment than that of making and curing tobacco.

In the first case, the chief disideratum is to obtain an early and adequate supply of plants. In the other, to secure a certain color and consistency or quality of the leaf, depending on the uses to which it is to be applied. In respect to the certainty in the supply of plants who has attempted any expedients, except a discriminating selection of the site and soil for the seed bed, fine tilth, early sowing, and protection from frost? And these

are precautions so obvious that there is really no extraordinary merit—no particular proof of forecast or sagacity in adopting them; and yet these very palpable measures are so often neglected, or imperfectly executed, that some planters are proverbial for their failure as are others for their uniform success. Why is it that such men as Mr. T. and Mr. S or Mr. H. or Mr. B. in Princes George's, and the Leaches in Calvert county, can always plant early, and have plants to spare? But is there no room for improvement? Are there no appliances yet untried that would secure a supply of plants, beyond the chance of disappointment? Has any thing been attempted to make sure of it, beyond what has been the common practice time out of mind? In every other art, in every other industry, we see improvements constantly making. The tanner the shoemaker, the hatter, the coach builder, the shipbuilder, the dyer, the cabinet maker, the ironmaster, all—all are "racking their brains" for some improved invention —*en avant*—go a head, is the motto of every trade and calling but that of the cultivation of the soil.

There are certain measures that we should like to see put in force, in the belief that the planter might always by these, have an abundance of plants. Let the seed bed in the first place be thoroughly well drained; so that not a particle of superfluous moisture would ever remain on, or in it. Then let its surface soil be thoroughly intermixed, and its color darkened with pulverised charcoal. This would attract heat, and retain moisture and amonia, and we doubt not, much increase and accelerate the growth of the plants. And where the bed can be made near the water, it might be easily watered with a cart and contrivance such as is used for watering the streets in large cities. Spaces might be left in the bed for the horse and the wheels to travelin, without touching the plants. But care must be taken never to use water at a temperature below that of the soil on which it is applied, lest the root should be chilled and the plant be injured instead of benefited.

Then as to the quality of the tobacco, in reference to color and inherent consistency of flavor; very much we know depends on the composition and quality of the soil and climate; but has any attempt been made to ascertain how much, and in what the connexion and dependence of the one on the other consists? What experiments have been instituted to determine the effect of early or late planting on the color and consistency of the leaf? Who can tell, as the results of actual trial, the effect in these respects, of high or low, early or late topping of the plants? and how much depends, too, upon exactness in the degree of maturity at the time of topping or cutting? Should not all these things, with every intellectual planter, be matters of actual investigation and experiments, for rational amusement, as well as for the sake of the "almighty dollar?" Does not this subject open a worthy and inviting field for the practical application of chemistry?—that noble art which since the days of Sir Humphrey Davy, has done so much to enlighten, invigorate, and reward labor in this and other departments.

When it is announced that cotton might be substituted with economy and effect for the villanous compound of saltpetre and brimstone, with what alacrity the government with all its powers, and all the tests of its scentific laboratories (for military use) stepped forth to see what could be made of it. Now only let it be understood that tobacco, of a certain color and texture, could be made the most efficient means of "killing our enemies," and the government would follow up the investigation as eagerly as young hounds pack and open when laid on the trail of a roasted bone.

To return to this interesting suggestion of our correspondent for divesting tobacco of its redundent moisture by the agency of salt, and thus accellerating the process of curing and guarding it more effectually against putrefacation; we have only to suggest one difficulty which occurs to us. Suppose the whole house to be hung with tobacco thus salted, or any considerable number of tier above tier, would not the dripping which, says our correspondent, "for several days kept the ground as wet as from a slight shower of rain," be apt to damage all the lower tiers? And another.

Would not the sweeping of the tobabco houses make excellent manure for seed beds, just as its leaves and frimmings are found to be the best, if not an all-sufficient manure for the grape vine—the manure which nature in fact provides for everything?—*Editor P. L. and A.*

Preparation of Seed Wheat.

By sifting, with suitable sieves, the large plump berries may be separated from the small and shrivelled, which will make a great improvement. Then wash thoroughly in water, stirring violently, and skim off all floating substances. Violent washing will rub off the seeds of fungus which might cause smut or other diseases, and destroys the eggs of insects; and by skimming the light seeds and other refuse substances may be excluded.

Various steeps are used as a further prevention of smut, &c., for which we have recommended violent washing. The following is cheap, convenient, safe, and probably as effectual as any; and it has the important advantage of floating oats, and grains of comparative lightness, that sink in pure water.

Make a solution of salt, as strong as it can be made, which is probably about one quart of salt to two gallons of water. In this steep the wheat, and remove worthless matters that rise; also the grains of wheat of comparative lightness. It is best to soak the wheat twelve to twenty-four hours; but when thus prepared, if the weather is favorable, it will keep in good condition for several days or weeks, if the brine is strong, as it will not vegetate in it.

We have kept wheat a week or two in this way; and a farmer informed us that he had prepared his wheat in brine, when his interval, where he intended to sow, was overflowed, and he kept it in brine three weeks, and, as it was late, he then spread and dried it, and sowed it the next spring with success.

After soaking wheat in brine, drain off the brine, which is a good manure, and add sufficient slacked lime to make it dry enough to sow. Sow soon after the lime is added. If any accident or storm prevents sowing soon, return the grain to the brine, as the best preservative.—*N. E. Farmer.*

Throwing Bread away.

We hear complaints on all sides that money is scarce, the times hard, and that it is difficult for the poor, in these dull times, to get a living. We suppose that by the word "living" is meant the prime staple of life, or, as it is sometimes called, the "staff of life," bread. Now bread is so plenty that we throw half of it away. In order to show wherein this is done every day, let us "reason together" a little. The principal material of which bread is made in New England is flour; and this you all know, is made of wheat. The good old days of corn bread and "rye and Indian" have gone by. Times have changed; and we may well say that we have changed most essentially with them. People may say what they please about the "hardy New Englanders." There used to be such a race, but they are disappearing, and an effeminate race growing up to supply their places. There are many causes for this deterioration of the strength of the people, but the principal cause is the present mode of living. We throw away the best half of the wheat, and eat only the finer parts. Every body must have superfine flour upon their table. Well, to make superfine flour, the wheat must be ground fine; he meal must then be bolted through the finest bolts or ieves; and the bran and other coarser parts are carefully separated, and consigned to the pig trough or cattle manger. What did the Almighty make these parts of the wheat for? For the nourishment of man; but man has become so "unco" wise that he throws them one side, and picks out only the finer particles; and he pays dearly the penalty of his folly, in decreased health, strength, and general stamina of constitution.

Let us inquire into the ingredients of wheat; and that we may not rest wholly on our own individual authority, we will call others in who have carefully examined the physical and chemical nature of wheat. Prof. J hnton has done this pretty thoroughly, and so we will draw upon him for a few facts.

First, we will take into consideration some of the materials of our bodies; and second, what is needed to keep up the repairs or supplies of these materials as fast as they are wasted or spent in the course of life.

The solid parts of the human body are fat, muscle, (flesh,) and bone.

The liquid or fluid parts of the human body contain also the fat, and muscle, and bone ingredients, in a fluid state, whereby they are conveyed to different parts of the body, to be deposited where needed.

Now, every body knows that these three substances are liable to constant waste, and require to be renewed constantly. To renew them, we must eat food, and if we eat food that contains fat-making, muscle-making and bone-making materials, and the food is digested in a healthy manner, this waste is repaired with ease and pleasure. As we commenced with the article bread, we will confine ourselves to that. Vegetable food contains these three ingredients or materials, and especially wheat.

That food must be the most nourishing that supplies all the ingredients of the body most abundantly, on the whole, or in proportions most suited to the wants of the animal that eats it.

Now, the grain of wheat, you know, consists of two parts, the inner grain, and the skin that covers it. The inner grain is your superfine flour, and the covering is the bran.

The miller is not able to peel the outer part perfectly away from the iuner, and so a little of it is always mixed with your flour, but by the process of bolting it is removed more completely than in any other way, and it may be considered as wholly separated.

According to Prof. J. of the fat-making materials whole grain contains 28 pounds in 1;000,; fine flour, 20 pounds; bran 60 pourds.

Thus you see, that, while 1,000 pounds of whole grain will give you 28 pounds of fat, 1,000 pounds of fine flour will give you but 20, and 1,000 pounds of bran will give you 60.

If, therefore, you grind the wheat all together, you get nearly half as much again of fat-making material.

Well, how is it with muscle, or flesh making material? Whole grain contains 156 pounds in 1,000; fine flour 130 pounds. So you see that wheat, ground all together, gives one fifth more muscle material than fine flour.

Our muscles, you will allow, are very serviceable, and their strength of great importance to us. Ought we not to supply them with the right materials? But when we bolt our wheat, and use only the fine parts, we throw away about two pounds of such out of every ten.

Of the bone-making material, whole grain contains 170 pounds in 1,000; bran 700 pounds, and fine flour 60 pounds.

You will certainly allow that bones are a very important part of your bodies; and you will see, by the above, that, as it regards them, the whole meal is nearly three times more nourishing than the fine flour.

Now, let us sum the whole together, and see if we have not made out a clear case, viz., that we are daily actually throwing a vast quantity of food away.

One thousand pounds of whole meal contain—

Muscular matter,	156 pounds.
Bone matter,	170 "
Fat matter,	28 "
	354

One thousand pounds of fine flour contain—

Muscular matter,	130 pounds.
Bone matter,	60 "
Fat matter,	20 "
	210

Now, deduct 210 from 345, and you have 144 pounds of matter very essential to nourishment thrown out

Who, then, will say that we are not throwing away food every day of our lives? Is it any wonder that we are growing up a delicate and effeminate people? Our children, instead of being fed upon coarse bread and turned into the open air for exercise, whereby lungs and limbs may be exercised and expanded, are fed on flour cake, of the finest kind, and mewed up in air tight houses, like plants in a hot bed, which wilt on exposure.

We do not wish to be ultra in our notions or expressions, but we honestly believe that the man who invented the bolt to a flour mill, cursed the nation.

COMPOSITION OF, AND NUURITION IN, VARIOUS GRAINS.

As the nutritive propeties of the various grain crops, as well as their erganic proportions generally, involve questions of profound interest in the economy and support of animal life, we make the following extracts from the able work of "Professor John P. Norton, entitled "Elements of Scientific Agriculture," just published:

"WHEAT is the most important of all crops. The grain contains from 50 to 70 per cent. of starch, from 10 to 20 per cent. of gluten, and from 3 to 5 per cent. of fatty matter. The proportion of gluten is said to be largest in the grain of quite warm countries.

"It is a singular fact, that in all the seed of wheat and other grains, the principal part of the oil lies near or in the skin, as also does a large portion of the gluten. The bran owes to this much of its nutritive and fattening qualities. Thus, in refining our flour to its utmost possible extent, we diminish somewhat its value for food. The phosphates of the ash also lie in a great degree in the skin. The best fine flour contains about 70 pounds of starch in each hundred. The residue of the 100 pounds consists of 10 or 12 lbs. of gluten, 6 or 8 lbs. of sugar and gum, 10 to 14 lbs. of water, and a little oil."

"RYE flour more nearly resembles wheaten flour in its composition than any other; it has, however, more of certain gummy and sugary substances, which make it tenacious and also impart a sweetish taste. In baking all grains and roots which have much starch in them, a a certain change takes place in their chemical composition. * * * By baking, flour becomes more nutritious, and more easily digestible, because more soluble."

"BARLEY contains rather less starch than wheat, also less sugar and gum. There is little gluten, but a substance somewhat like it and containing about the same amount of nitrogen."

"OATMEAL is little used as food in this country, but it is equal, if not superior in its nutritious qualities to flour from any of the other grains; superior I have no doubt, to most of the fine wheaten flour of the northern latitudes. It contains from 10 to 18 per cent. of a body having about the same amount of nitrogen or gluten. Besides this, there is a considerable quantity of of sugar and gum, and from 5 to 6 per cent. of oil or fatty matter, which may be obtained in the form of a clear fragrant liquid. Oatmeal cakes owe their peculiar agreeable taste and smell to this oil. Oatmeal, then, has not only an abundance of substance containing nitrogen, but is also quite fattening. It is, in short, an excellent food for working animals, and, as has been abundantly proved in Scotland, for working men also."

"BUCKWHEAT is less nutritious than the other grains which we have noticed. Its flour has from 6 to 10 per cent. of nitrogenous compounds, about 50 per cent. of starch, and from 5 to 8 of sugar and gum. In speaking of buckwheat or of oats, we of course mean without husks."

"RICE was formerly supposed to contain little nitrogen, but recent examinations have shown that there is a considerable portion, some 6 or 8 per cent. of a substance like gluten. The per-centage of fatty matter and of sugar is quite small, but that of starch much larger than in any grain yet mentioned, being between 80 and 90 per cent., usually about 85."

"INDIAN CORN is the last of grains that we shall notice. This contains about 60 per cent. of starch, nearly the same as oats. The proportion of oil and gum is large, about 10 per cent.; this explains the fattening properties of Indian meal, so well known to practical men. There is, besides these, a good proportion of sugar. The nitrogenous substances are also considerable in quantity, some 12 to 16 per cent. All of these statements are from the prize essay of Mr. J. H. Salisbury, published by the New York State Agricultural Society. They show that the results of European chemists, hitherto published, have probably been obtained by the examination of varieties inferior to ours; they have not placed Indian corn much above the level of buckwheat or rice, whereas, from the above, it is seen to be "in most respects, superior to any other grain."

"SWEET CORN differs from all other varieties, containing only about 18 per cent. of starch. The amount of sugar is of course quite large; the nitrogenous substances amount to the very large proportion of about 20 per cent., of gum to 13 or 14, and of oil to about 11. This, from the above results, is one of the most nourishing crops grown. If it can be made to yield as much per acre as the harder varieties, it is well worthy of a trial on a large scale."

Gluten and nitrogenous substances are those which form muscle, or flesh.—[Ed. Am. Farmer.

HEDGES.—The best hedge in the United States, says the Genesee Farmer, extends about a mile along the highway, on a plantation of 3,000 acres, near Augusta, Ga. It is the Cherokee Rose, and is now in full bloom, presenting a magnificent floral spectacle, and filling the atmosphere with a delicious perfume. No animal without wings can get over or through it. Having stood over fifty years it still promises a good fence for a century to come. The owner and occupant of this splendin estate, Mr. De. L'aigle, was a St. Domingo planter at the time of the insurrection and dreadful massacre by the blacks, and was so for fortunate as to make his escape to the United States.

Education and Choice of Profession.

BY JOHN A. KENNICOTT, M. D., OF THE GROVE, ILL.

Continued from page 144.

To the Editor of the Valley Farmer:

I must acknowledge that my essay is assuming an unusual length, and if not destitute of force, may well be deemed rather a dull and common place production,—and yet can too much be said on the subject of education for the farmer and mechanic? I think not. The destiny of this great people must be worked out. Providence has placed us in a land of unbounded natural fertility, and capacity for improvement, and the support of man. And then the actual political power of our beloved country will soon be, with the weight of numbers, in the Great West. We are now forming the chacter of the population that must one day decide every great question in government and legislation.

When the "Iron Horse" shall have scared the last bison from the great plains, where God has placed them for the support of his "red children,"—when the last "poor Indian" shall have hid himself in the recesses of the Rocky Mountains, or the grave, to which his race are hastening,—bnd the new Territories of the Upper Mississippi and the South West shall be within a week's journey of Oregon and California—*then* shall this thing happen—and the child now fitting for school shall scarcely be a voter, ere most of this prediction shall be accomplished.

Brother farmersand me chanics, we can yet educate *ourselves*, and we *must* educate our children. You can see the grave responsibilities that await them. If we do our duty now they will do theirs then—and the latter half of the 19th century will be the commencement of a new era in Taste, Morality, and Politics, as the first has been in Art, Science, and Literature.

And now, what shall we learn in order to do that wisely and happily, which nature, and the genius of our institutions require of us?

Let every child be taught that industry is a virtue and a necessity; that knowledge is not only wealth and power, but happiness; that whatever great or good thing man has done, man can do again; that this earth ;sNOT one of constant trial and suffering, but is full of beauty and excellence and enjoyments, if we so educate our minds and bodies as to perceive and appreciate the pure pleasures that a good God has thrown around us. 'Tis just as easy for us to be happy as miserable. Can you produce sweet music from an instrument whose strings are broken or out of tune? We must see that body and mind are both in tune; the former healthy—the latter well cultivated. Can you hope to gather cotton from "Jimson weed," or corn from Canada thistles? Just as well may you hope that the body, broken by disease or vicious indulgence, or the mind, cankered by vice or brutified by ignorance, can enjoy the things that make virtue and wisdom supremely blessed.

All are not equal in capacity or talents, more than in t rength or stature, or the perfection of the form and the senses. Put it will be found that all have a share of the gifts of bounteous natnre, and are capable of usefulness and enjoyment—some in one way, some in another.

Who shall say that the millionaire, or the man who leads armies, or directs a nation, enjoys more happiness than he who tills his quarter section with his own hand, or bends over the work bench or the anvil? For one, I deem the latter happier—for he has fewer cares and anxieties. I have known many rich and a few "great and powerful" men in my day—and I feel assured that none of these have been better, or happier than you and I, dear reader.

Then teach your children, that they will be happy *here* as well as *hereafter*, if they study to deserve happiness, and that every useful thing they learn is but adding to their capacity and prospects of present and future enjoyment. Oh, this is a glorious and a beautiful world! Ah, Doctor, says my friend—"If ignorance is bliss 'tis folly to be wise," "A little learning is a dangerous thing," &c., &c. Bah—my friend, this may be good poetry, but tis all a heap of mischief. IGNORANCE is NOT "bliss." It may be freedom from care, it is freedom from thought and from HOPE. The enjoyment of the ignorant does not equal that of the brute creation—for the ignorant man fears death, and is full of superstitious dread and mental suffering—often increased by bodily afflictions, the growth of a darkened intellect and an age of humbug.

And this second idea is about as inapplicable as the other. The gifted poet meant to ridicule quacks in "learning." But we hold that "learning" and "knowledge" are two different things—and a "little" knowledge is far better than none; for (other things being equal) I believe that man is useful and happy in proportion to the amount of his refinement and knowledge.

First, then, teach your child self restraint, self-reliance, industry, activity, cleanliness, cheerfulness, hopefulness; and every day see that some new or useful idea or accomplishment has been repeated or acquired. Teach your child to use choice language, teach simple music,—and THEN teach words, and their signs and value.

A farmer or mechanic can, in a very short time, learn all that is postively necessary to ordinary success in any one pursuit. But a farmer should know more than one thing, and the mechanic should be capable of doing more than one. There will be time enough—there is time for all things, if you have a time for every thing, and every thing in time.

But I have tired myself, if not you, my kind friend, and I will resume this subject soon, and perhaps bring it to an abrupt conclusion.

The Grove, July 2, 1850.

If you wish to make a good cow of a two years old heifer, let her have a calf, and then milk her three times a day regularly. This will increase her capacity to secrete milk.

First procure first rate animals for your farm, and then procure good, humane, and intelligent men to take care of them.

Discussion on Wheat Culture.

At one of the Agricultural meetings in Albany, last winter, the subject of Wheat culture was discussed by several gentlemen possessed of considerable practical knowledge. As some valuable and interesting facts were elicited, we copy the remarks of the principal speakers, as reported for the Albany papers:

Mr. Brewer, of Tompkins county, said he had cultivated wheat for more than twenty years, and would give some of the results of his experience. A part of his farm, which in 1830 was an open common, has been wholly devoted to wheat and clover since that time—having produced thirteen crops of wheat and eight of clover. The soil is rather a gravelly loam. His farm is on one of the hills, towards the head of Cayuga lake, which it is said were burned over by the Indians every year. He had made various experiments in plowing at various depths—from three to seven inches—and has always had the best crops where the furrows have been the shallowest. Usually plows but once for wheat; has sometimes plowed in May, but had no better crops than when he plowed in September, just before sowing. The yields he had obtained were from sixteen to twenty-six bushels per acre. On new land, stiff soils for instance, it might be necessary to plow more than once for a wheat crop, and in such cases it might be better to plow deep the first time.

Mr. B. stated that he had made some trials with various quantities of seed per acre, as one and a half, one and three quarters, two, and two and a half bushels, and had usually got the best returns from the latter quantity; that is, two and a half bushels of seed had given from two to three bushels more yield per acre, than two bushels of seed, and six bushels more than one and a half bushels seed. He had not been plagued with rust but once in twenty years. Was seldom annoyed with the Hessian fly or the wheat midge; but the wheat has often been much injured by these insects in valleys, when it was not noticed on the hills. Has commenced sowing wheat in drills; sowed a part of his crop in this way last fall; the drilled portion looked much the best at the setting in of winter. Saw two fields of wheat last year, adjoining each other, on one of which the seed was drilled in, and on the other sown broadcast; the drilled yielded much the best. Drilled wheat stands the winter best; the small ridges between the rows are constantly working down, and keep the roots of the wheat covered.

Mr. B. spoke of the Etrurian wheat, which had lately been introduced, and had so far done well—it weighed sixty-four pounds to the bushel.

Mr. Lawrence, of Yates county, differed from the preceding speaker in regard to the proper depth of plowing. The remarks in favor of shallow plowing, seemed strange to his ear. The farmers of Yates improve their land by deep plowing. The farm which he occupied had been rented for many years previously to its coming into his possession, and had been plowed about four inches deep, and produced twelve to fifteen bushels wheat per acre: he at once plowed it six to seven inches deep, and raised the first season thirty bushels of wheat to the acre. It was the general expression in his county, that deep tillage was the best for all crops.

He had tried subsoiling; first plowed with a common plow seven inches, then run the subsoil plow the same depth—cross-plowed before sowing wheat, has invariably had the best crops where he has subsoiled, has sometimes subsoiled a portion of a field and left the remainder plowed only in the ordinary way, and the yield is always in favor of the subsoiled part. His is a strong limestone soil, and he intends to subsoil his whole farm, as he believes it will pay. Makes great use of clover as a fertilizer, and uses plaster to benefit the clover. Never could perceive that plaster benefitted the wheat much, but it greatly increases the growth of clover. Attributes the improvement of the soil by clover mostly to the roots,—they penetrate the earth to the depth of two to two and a half feet, and raise the soluble substances on which the plant feeds, to the surface, where, by decompesition, they supply food to the wheat crop.

Mr. L. said wheat was formerly raised in Yates county chiefly on fallows; but latterly the more common course is to take first corn, then barley, then wheat, the corn generally manured, but it must be remembered this cannot be done on a poor soil. He had tried wheat after various kinds of grain, but it does best after barley. The system of drilling wheat is beginning to be practiced in Yates county, and he concurred with what had heretofore been said in regard to the advantages of this mode of sowing. Palmer's is the kind of drill most in use in his neighborhood and it gives good satisfaction. The quantity of seed sown can be regulated to a quart to the acre. It covers the seed one and a half to two inches deep. The rows are nine inches apart. The cost of the machine is fifty-five dollars. The best varieties of wheat in Yates county, are the Hutchinson, Soule's and Flint. Many preferred the Hutchinson on account of its earliness and freedom from rust. It would ripen two weeks earlier than the red chaff. Mr. L. thought they raised as good crops of wheat in Yates as in any county in the State: he had himself raised 44 bushels per acre on sixteen acres in 1846.

Lieut. Gov. Patterson said his experience was in favor of deep plowing. The wheat lands in the Genesee valley, when new, produced about fifteen bushels of wheat per acre. They were plowed shallow—the farmers generally had not

then sufficient strength of team to plow deep; now they plow much deeper than formerly, and obtain 25 to 30 bushels per acre. In Livingston county, 35 bushels were obtained on some farms. Some farmers there now plow ten inches deep. Deep tillage has many advantages, an important one is that it enables crops to withstand drouth. As to varieties of wheat, the old red chaff bald had done best with him, and he had tried many kinds. The Soule's variety had done better than the flint, but two crops of the red chaff are better than three of the flint. The blue stem is being introduced and meets with favor. The proper time to sow wheat in the Genesee valley is from the fifteenth to the twenty-fifth of September. If sown earlier than this, it is very liable to be injured by the Hessian fly. As to the quantity of seed per acre, he thought that a bushel and a half, if thrashed with a flail, or trodden out by horses, was about right; if the seed was thrashed with a machine, two bushels per acre were necessary. The difference was owing to the wheat being broken in passing through a machine, so that many of the grains would not germinate. In regard to summer fallowing, he had better success with wheat on ground so prepared than in any other way, and thought he could raise wheat in that way cheaper than he could raise corn or oats. As a crop to precede wheat, he considers peas preferable to any kind of grain, or any crop, except flax. The cheapest manure for wheat is clover, though he would use all the manure from the barn-yard. Considers a good crop of clover equal to twenty yards of ordinary yard manure per acre. His practice is to sow six or eight pounds of clover seed per acre, seed costing about ten cents per pound. In spring sows 100 lbs. of plaster per acre, pastures the clover till latter part of May and plows it under in June. Could never see that plaster benefitted the wheat, but it makes the clover, and clover makes the wheat. He is much in favor of the system of drilling wheat. Wheat put in by this method is less liable to be winter-killed. The roots of grain that is sown broadcast, are often injured by the earth being blown off from them; by the drill system this is prevented, the earth which forms the ridges between the rows being blown over the wheat, keeping the roots covered. His wheat crops have sometimes been forty bushels per acre, has raised thirty bushels per acre on sixty acres.

Mr. Cowles, of Onondaga county, said there was great variety of soil in that county: that on which oak and chestnut constituted the chief timber growth was best for wheat; but thirty years ago this kind of land was generally thought good for nothing. When it was first tilled, it was plowed about four inches deep, and it did not produce very well; now it is plowed from seven to ten inches deep, and the crops are good and the land is growing better. On this kind of land, plaster benefits all crops, but on some other soils plaster has no apparent effect. On the chestnut and oak lands, the best crops of wheat are obtained by sowing about the first of September. He had noticed the effect of different crops on wheat. A field was sown as follows: one-third with peas, one-third with barley, one-third with oats. The next crop was wheat. It proved best after the peas, next best after barley' and poorest after oats. So far as his observation had gone, wheat has generally been poorer after oats than after any other crop. On his land wheat is generally best after a summer fallow. As to varieties, the old fashioned flint is best, the Canada flint is next best. He related an experiment: a neighbor of his took some winter wheat, a white variety, put it into tubs, wet it, and left it to freeze, it being in the winter season. It remained frozen till spring, when it was sown; the produce was a red spring wheat, and it had been continued in his neighborhood until this day. The experiment convinced him that all wheat is of one species, and that varieties might be originated by causes unusually affecting the germ of the plant.

Lieut. Gov. Patterson had no reason to doubt the result of the experiment just cited, it brought to his mind the long contested point of the transmutation of wheat into chess. He has known chess produced under circumstances which seemed to favor that hypothesis: he knew a piece of new land, just cleared from the forest, at a considerable distance from any other cleared land, sown to wheat, and on a swale, in the middle of the piece, there was scarcely any thing grown but chess.

Mr. Lawrence said he could not believe that a grain of wheat ever produced chess. All the cases of supposed transmutation that he had ever heard of, could be explained without resorting to such an unnatural idea. It is sometimes said that clean wheat has been sown and produced chess. But he had often examined wheat that was called clean, and found chess enough among it to produce all that grew among the wheat. In wet places the wheat dies out, but the chess grows all the better, and people are astonished at the quantity.

Mr. ——, whose name we did not learn, made some remarks in regard to smut; he had sown a piece of ground with seed wheat that was a little smutty, but scarcely enough to be noticed —did not apply lime or any thing to prevent smut and the crop was two-thirds smut. His son sowed some of the same seed, prepared by soaking brine, and then limed, and the crop had hardly any smut in it. He inquired whether this accorded with general experience. Several gentlemen replied that they had never been troubled with smut if the seed was treated with lime, alkali, or vitriol.

HOW CITIES EXHAUST THE FERTILITY OF LAND.

There has been enough of the elements of bread and meat, wool and cotton, drawn from the surface of the earth, sent to London and buried in the grouud or washed into the Thames, to feed and clothe the entire population of the world for a century, under a wise system of agriculture and horticultnre. Down to this day, great cities have ever been the desolators of the earth. It is for this that the have been so frequently buired many feet beneath the rubish of their idols of brick and stone and mortar, to be inhumed in after ages by some antiquarian Layard. Tneir inhabitants violated the laws of nature, which govern the health of man and secure the enduring productiveness of the soil. How few comprehend the fact that it is only the elements of bread and meat, evolved during the decomposition of some vegetable or animal substance, that poisons the air taken into human lungs, and the water that enters the human system in daily food and drink! These generate pestilence, and bring millions prematurely to their graves.

Why should the preious atoms of potash, which organized the starch in all the flour, meal and potatoes consumed in the cities of the United States in the year 1850, be lost forever to the world? Can a man create s new atom of potash or of phosphorus when the supply fails in the soil, as fail it must under our present system of farm economy? Many a broad desert in Eastern Asia once gladdened the husbandman with golden harvests. While America is the only country on the globe where every human being has enough to eat, and miliions are coming here for bread, how long shall we continue to impovish ninety-nine acres in a hundred of all that we cultivate? Both pestilence and famine are the offspring of ignorence. Rural science is not a mere plaything for the amusement of grown-up children. It is a new revelation of the goodness of Providence, a humanizing power which is destined to elevate man an immeasurable distance above his present condition. To achieve this result, the light of science must not be confined to colleges; it must enter and illnminate the dwelling of every farmer and mechanic. The knowledge of a few, no matter how profound, nor how brilliant, can never compensate for the loss sustained by neglecting to develope the intellect of many.

No government should be wanting in sympathy with the people, whether the object be the prevention of disease, the improvement of land, or the education of the masses. One per cent. of the money now annually lost by reason of popular ignorance would suffice to remove that ignorance.—[Patent Office Report.

Three persons may keep a secret, if two of them are dead.

TREATMENT OF HAY.

Hay, in England is scarcely ever put in barns. It keeps well in stacks, made up as they are in the neatest manner, and carefully thatched with straw. Nothing can be more beautiful and workmanlike than the manner in which these are made up; and for hay, the long stacks are decidedly preferable to those of a round form, as it is cut down for use in such case, with more advantage. The formation of a stack, which is often done by the women, is a work of much skill, which is the fruit only of practice; the thatching of a stack in the best manner requires both art and experience, and there are men who make it a profession. When well executed, the hay for years is impervious to wet. During the formation of the stack, —which, when intended to be large, must sometimes wait for several days the progress of the haymaking,—The most careful farmers have a lage tarpaulin or canvas covering, to suspend upon poles over the stack, in order to protect it from rain. I refer to these minute circumstances, to illustrate the extreme carefulness with which many of the operations of husbaandry are here conducted. When the hay is to be used, a whole stack is never removed to the stables at once, but is carefully cut down as a loaf of bread might be cut, and always done up and bound in trusses, intended to be of fifty-six pounds each, and in that way carried to be distributed to the animals. This requires some extra labor; but the farmers find their account in it. How different this is from the careless and wasteful manner in which things are managed with us, where I have often seen horses and oxen standing knee deep in a litter of the very best hay, which has fallen and been tossed out of the mangers! The consequence of this extraordinary painstaking is the most economical management of their products. The animals have their regular allowance, and are not at one time surfeited, and at another starved, and not a handful of hay is wasted. I have never been quite able to understand the old proverb, that "a penny saved is twopence earned;" but I quite understand the folly of wasting that which is the product of severe toil and expense, and the immorality of throwing away that which the bounty of heaven bestowed for the comfort and sustenance of man or beast. I once heard a minister say, in his sermon, that some persons were charitable in spots. I think, in a similar sense, it may be said that some persons are economical in spots; and many persons who will chaffer and higgle half a day to save a sixpence in the price of an article, will often throw away shillings in their neglectful or wasteful use of it.—(Coleman's European Agriculture.

If a man is too poor to take a newspaper, or send his children to school, how many dogs should he keep.

Time for Cutting Grass.

In cutting clover, farmers generally judge of the time from the appearance of the heads, rather than from an examination of the seed. Many prefer the time for cutting when one third part of the heads have turned a dark color.

Orchard grass, when it grows large, should be cut when in bloom, else the stalks will be too dry and hard to be relished by stock. As this grass grows rapidly, and needs cutting rather early, it is well adapted to growing with clover, as it should be cut about the same time.

As to the time of cutting Herds grass, there are different opinions; some prefer the time when it is in blossom, others when the seed is well grown, that is full, as we say of corn. This was a subject of debate at the agricultural meeting at the State House, last winter, in which different views and reasons were offered.

Judging from experience, and reasoning from analogy, we prefer cutting herds grass when the seed is full. We recollect that there was a time when it was considered that the best period for cutting this grass was when it is in the blossom; but after long experience, farmers generally change their minds on this subject, and had it not been for the standing of men who still advocated the early cutting of grass, we should have thought that this practice ranked with the whims and prejudices of our forefathers.

We have observed that grass cut when in blossom, not only made far less bulk of hay, but far less weight, and though cattle might at first take hold of the early cut fodder more eagerly, they would after a while leave it for that which was well grown and cut in its prime. The early cut grass, even when dry and made into hay, still resembles grass, and has less substance.

We think that there is no point of time in which herds grass, and plants in general, used as fodder, gain so fast in nutriment, as from the time they blossom till the seed is full grown. The English writers recommend cutting grass when it is ripe, and we believe that the time of ripening, as considered by them, is when the seed is full, for when the seed is full it is ripe, so far as vegetation is concerned. We have found that some seeds, and all that we have tried, have vegetated on being planted as soon as fully grown, though soft and green as we consider it, judging from appearance.

We do not depend on chemical analysis of English authors as to the amount of nutriment in grasses, cut at different periods, as we depend more on the weight of hay, and its effect on stock.

In reasoning from analogy, we find much in favor of the position that we have taken. We believe that almost every farmer, who would choose the most favorable time for cutting corn, oats, barley, or any other grain, or any plants, in order to have the greatest amount of nutriment for stock, would choose as late a time as that in which the seed was well grown.

We believe that if corn be cut up when the seed is full, that there would be more nutriment in the stalks, than at an earlier period, to say nothing of the grain. And if stalks are not cut till after the corn is full and ripening, it is not thought that they loose any thing for some time after the grain is full.

It is not to be expected that farmers can cut all their grass at the most suitable period, when they have much to do; but it is important to know the best time that every one may come as near it as possible. Some grass must of course be cut rather before the proper time, else a great deal will remain too long.—*N. E. Farmer.*

Teach the Boys and Girls to Milk.

The art of milking well is not taught in a hurry. It requires long practice to milk properly, and therefore all young people on a farm ought to be shown how the labor should be done. It is quite important that this branch of dairying should be particularly attended to, for a good milker obtains at least a quarter more from the same cow than a poor milker.

The first lesson to be taught to young people is kindness and gentleness to cows. They never need to be treated harshly in case the business is properly commenced. Cows that have been caressed and uniformly well treated are fond of having the milk drawn from the udder at the regular time of milking, for it gives them relief from the distension of the milk ducts.

Let young people be put to milking the farrow cows first, or such as are to be dried, and then the loss from bad milking will be less injurious. The hand should extend to the extremity of the teats, for the milk is then drawn easier.

Young people should be taught to milk as fast as possible. More milk is always obtained by a rapid milker than by a slow one. They should therefore be taught to think of nothing else while milking, and no conversation must be permitted in the milk yard. They should sit up close to the cow and press the left arm gently against her shank. Then if she raises her foot, as she sometimes will, merely to change position, she will not be so likely to put it into the pail.

In case of a disposition to kick, or rather to raise her foot on account of pain occasioned by soreness of the teats, the nearer the milker sits to her, and the harder he presses his left arm against her leg, the less risk will he run of being injured.

Cows may be taught to give down their milk at once—and they may be taught to hold it a long while and to be stripped indefinitely. The best way is to milk quick and not use the cow to a long stripping, or an after stripping.—[Mass. Ploughman.

From Moore's Rural New Yorker

Breaking in Heifers.

It is highly desirable that the cow, especially if she be a good one, should have good habits. She is so useful, so entirely indispensable in the circle of domestic comforts, that it is of the highest importance she be gentle and kind.

Now I suppose that the disposition to kick when being milked, may have its origin in two causes—one, sheer badness of temper—and the other the principle of self preservation. If sore or swollen, so that she is hurt or pained in the process of milking, she kicks on the ground of resisting the evil—of protecting herself. It is the only remedy she knows. It is entirely consistent with good temper, and will cease when the ailment which induces it shall cease. I have had a perfectly kind and gentle cow kick when milked by one person, and never kick when milked by a certain other person under the same circumstances, and even on the same day. In the first case the pressure of the hand of an unskillful or careless milker hurt the animal, no doubt, and she kicked by way of resisting it—on the other, the pressure was such as to cause no uneasiness. It is almost indispensable to the future gentleness of the cow, that the heifer should be handled and tamed the first winter, when she is less than twelve months old. But when continual kicking is the result of bad temper, no consideration, except very great excellence in regard to quantity and quality of milk should influence to keep her from speedy consignment to the butcher's stall.

Passing the night once, at the public house of a Scotch farmer in Westchester county, he invited me to look at his dairy cows, ten in number, which were then milking. Perceiving that one cow of superior appearance, indicating high character of English blood, attracted my notice, he remarked: "That cow I recently bought of Hon. Mr. J., whose country lesidence lies before us. He esteemed her the best cow in his herd, and, if gentle, worth one hundred dollars; but, considered her lost to him on account of her kicking. On being assured I could cure her, he proposed that I should give him $25, and take her at my own risk. I did so, and there is not a cow before us that I milk with more ease and safety. Now I always break in my heifers with hopples. I treat them gently, but hopple them when I learn them to be milked. So I hoppled this great cow, and although she struggled and fell once or twice, she soon found the hopple was the master, and her submission has been entire and perfect."

I have never had occasion to break in heifers this way myself, but in the course of my experience have been obliged to resort to it twice, when the quality of the cow reconciled me to the effort, to retain her in the dairy. Her hopple was made of a short rope of hair, as being softer than one made of hemp. On one end was a loop—on the other end a wooden pin, about one quarter of an inch in diameter, and about four inches long, forming a T. Putting this rope around her leg, we twisted it over and over between her legs, till room only was left to encircle the other leg with the two ends, and allow the pin to pass through the loop, which secured it better than if it had been tied. She could not walk—if she attempted to raise one leg, it pulled up the other—she could spring, and in so doing fell, and speedily gave up the contest. From my own experiment I could recommend this fixture in cases of urgent necessity.

Experiments in Agriculture.

The value of an agricultural journal depends upon the number of experiments connected with farming business, judiciously made, and fully detailed, which it makes known to the agricultural world. We go to books, usually, for abstract learning, but the common routine of practise may be picked up almost any where. We want to know through periodicals current facts—what improvements have been attempted—how they have been attempted, and with what success—good or ill; for it is just as important to know what has failed as what has succeeded, and in general more important. Saving is gaining. We may be able to gain by few of the operations that have been profitable to others, since a thousand causes may prevent our even trying to do so. But there are few failures, the knowledge of which would not, in some way, serve and benefit us. Now nearly every farmer is experimenting more or less, all the time. How few of them let us know about these experiments! Failures are always kept profoundly secret; and as success rarely equals expectation, that is seldom deemed worthy of being made public. For the most part, the accounts we have of experiments, are from persons, who, having undertaken something new and important to themselves, cannot restrain their desire to talk about it. They rush into the journals, sometimes at the first heat, when they have only conceived the thing, and before they have begun to work. In general, however, something has been done, and high hopes are entertained. We then hear of the beginning, and the brilliant success, and nine times in ten, we never hear of the matter again. It fails—of course we are not told, though I think the experimenter is under solemn obligations to do it. It succeeds entirely, but the novelty is gone; it has become an old thing, and the experimenter is looking forward to something else. How many half-told experiments lie buried, Mr. Editor in your past volumes!

But the worst is, that when even sensible farmers undertake to give accounts of valuable experiments and improvements, they seldom do so in a way to be understood to any useful extent at a distance. Few appreciate all the particulars that go to constitute an experiment, every one of which must be accurately detailed to enable another to profit by it. Now let us consider a moment as to experiments in growing crops. First, we must know what kind of land the crop is grown on. Nothing can be more unsatisfactory than to say, it is a clay or sand, or even heavy clay or loamy sand. To arrive at certainty, we ought to have an analysis of it. At least, we should be told as nearly as can be describ-

ed, the precise nature of both the soil and subsoil. Then we should know what is its geological character—what rocks, if any exist in the neighborhood, and, as near as may be, its longitude and latitude, for climate and position are of vast importance. We should also know the previous history of the land, and its treatment for many years before. If manure is used, we should know the ingredients and value of that, the time and manner of applying it, and the precise quantity in bushels, cords, or tons. When I come to so many "loads" of manure used in an experiment, I stop reading and pass on to the next article. My loads of manure vary from ten bushels to a hundred, and I have no idea of a load of itself.

Next, we must know something of the seed used. There are 100 varieties of wheat, 150 of potatoes, and perhaps as many of corn. The variety planted is important. How often, how deep, and at what times the land was broken and the crop plowed, must be stated. When the ground was seeded—how deep, how covered—when it came up—how much rain and drouth it encountered: all these must be known.

And lastly, the true amount of production must be stated in exact weight or measure, or both. All these particulars, and many I have not enumerated, are indispensable to be known, that one farmer may profit by the experiments of another, a hundred, or even twenty miles distant. Yet how seldom are they given. How seldom does the experimenter himself know, or keep any accurate account of these things. And here is the secret of the slow progress of agricultural improvement. Not one farmer in a thousand knows half the time, what he himself is doing. For the want of knowledge, of close observation and accurate registering of details, he is forever attributing effects to wrong causes, and goes blundering on, blindly groping his way year after year, and if he writes for the journals, leading others astray. And this has been repeated so often, that it is not to be wondred at that book-forming is held in contempt.

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From the Wool Grower.

WHITTLING SHINGLES.

Scene.—*Mr. Plowhandle's door yard—John and Editor, seated on logs on the sunny side of his great wood-pile. John whittling a beech chip: the Editor a bass wood splinter.*

Editor.—Whittle from you, John; why don't you whittle from you?

John.—What's the difference? Whittling is whittling, any way, whether you whittle from you or toward you.

Editor.—A mistake, John; a palpable mistake. There is philosophy in whittling. There is a right way and a wrong way to do everything; and for the right way there is always a good reason.

John.—Pray what reason for whittling from you? It's a small matter at best—really too small too consider.

Editor.—Wrong again! It's the observance of these little things—the consideration of trifles—that constitute what men call good or bad luck. There now you have cut your finger—not bad I hope.

John.—Not very. Blast the knife. (Throws it down.)

Editor.—Well this is an apt illustration—proof positive—before I had hardly commenced my argument.

John.—I'd like to know what cutting my finger has to do with luck, good, bad, or indifferent?

Editor.—Everything. If you had but considered a moment you would have seen that whittling towards you was dangerous; common prudence would have shown you that you might cut your fingers; while if you whittle from you, there was no danger. Herein, then, is the key to that phantom which men call luck.

John.—Don't you believe in luck?

Editor.—Don't I believe the moon is a green cheese? No, sir. There is no such thing. It's all moonshine Just now you cut your finger, and say "I am unlucky." No such thing—you were stupid, careless. There's old Gripe, who began with no other capital than his axe, worth now his thousands; and you and everybody else says, "as lucky as old Gripe." and yet we all know that he has made his money by the operations of a clear intellect—a shrewd close observance of little things—turning the stream at the fountain and not waiting until it gets to be a river.

John—Training the sapling and not the tree.

Editor—Exactly. A good idea. You always find him about his business. His work is never behind. His hay don't get caught out in the rain. His wheat is never wet in the bundle or swarth. He looks at little things. If his grain is to stand out over night, it's all nicely put up in stocks and capped; if his hay can't be carted the same day, it's raked and cocked. He says I am not master of the elements, but I am of my time. So he makes sure against contingencies which he cannot control. He always whittles from him, and he is called lucky.

John.—And he is lucky.

Editor.—No such thing, if you mean by that chance favoring him more than others. Now, there's Dick Careless, he is always railing at his bad luck. Dick works hard. I think he does more real hard work than Gripe. But every body pities poor Dick, he has such "hard luck." If it were not for his wife he would have been in the poor house before now. Every body says "what a clever fellow is Dick;" and so he is. He minds very body's business but his own. Dick stacks hi hay but neglects to put on binders, and the top blows off and the stack is ruined. He has a nice crop of wheat cut, and intends to cart it to-morrow, so he leaves the wheat carried into bunches. But to-morrow it comes on to rain, and his wheat gets wet and sprouts, and you say "well that's just Dick's luck." Dick has had "bad luck" with his sheep and cattle and horses, always loosing more or less every year. Now you believe in luck, well just tell me why he looses more that you do?

John.—He is careless. Don't take pains enough with them.

Editor.—Oh! that's it. Which way do you think he whittles? Two to one, John, he whittles toward him.

He can't see any difference; and like you is a firm believer in luck. There's Tapewell, every body says "what a lucky fellow he has been, got rich as a nabob, and had only a few goods to start upon." While Gingham; who had a fine store, full of goods, went all to smash in three years!

John.—Yes, and old Tape bought his fine store and house at about one-quarter its cost. Wasn't that luck?

Editor.—No sir. Tape lived within his means, and accumulated his profits. He did not care for a fine store while he could sell his goods in an old one; and being at less expense he could always sell a little cheaper, and thus get the best custom. Gingham lived up to his income, and a little over, so when hard times came he could not collect, could not pay, and down he went; while Tape was snug in his old store. Poor Gingham was called unlucky But you see, the only difficulty was, he whittled toward himself, 'till he cut his fingers —while Tape always whittled the other way. No such thing as luck there, John.

John.—Don't give it up yet. You are as plausable as a lawyer in a bad case; but still I am not convinced. I lost a young colt, the other day—dropped down dead in the field—was worth a cool hundred—now, was not that bad luck? I don't know what you call it, but I call it confounded bad luck.

Editor.—How had you kept the colt?

John.—In the stable all winter, on carrots and hay, in fine order Turned him out to grass the other day and before night of the second day he was stone dead.

Editor. Did he run much when you let him go? Large field?

John.—Ah! didn't he run! Only a ten acre lot. I thought the fellow would never get enough. What an elegant racer he would have made.

Editor.—Day was warm and night cold?

John.—Yes, but what of that?

Editor.—Oh, nothing! only you whittled toward you.

John.—How so?

Editor.—Simple John! This was called "luck," while it's rank stupidity. Your colt was in high condition—had not been exercised. A prudent man would have put him into a small yard, until he had becoms somewhat quieted. Old Gripe would not have left him out ver a cold night, after he had been exercised so severely in a hot sun. The colt was a victim to your own thoughtlessness. He killed himself running. Lucky, John.

John.—How could I tell he would hurt himself by being turned out? Never had one before, and have done just the same times enough before.

Editor.—That's it. We come back to where we started. It's the observance of these trifles, nothing more that makes men lucky or unlucky. Whittle from you John, always whittle from you, and a fig for luck.

John.—Well there's one kind of luck I know you delight in, and that's ready.

Editor.—And pray what's that?

John.—Pot-luck, to be sure.

Editor.—Good I am with you.

Intelligent Dogs.—Several years ago, Judge Hopkinson, of Philadelpha, owned two dogs, both of them remarkable for their intelligence. Oscar carried letters and newspapers from his master's house to a friend who lived several squares distant. He barked when he reached the house, was admitted, allowed the parcel to be untied from his nick, and waited patiently for an answer, returned home, gave notice of his arrival by barking, and was ready to go again on similar errands. Spring, the other dog, was a short legged, half terrier; he possessed memory and the reflective powers in a great degree. A lady about half a mile distant from his master's house, being very fond of animals, always paid great attention to Spring when he was on a visit with his master or mistress. Finding this very agreeable he took it in his head to pay his visits alone. Without any tuition, he raised himself on his hind legs and attempted to ring the bell, but all his efforts could only produce a jarring of the wires. Being an unusual sound, the servant, within sight of the bell below, went to the street door to ascertain the cause, and Spring rushed in. After that, as his visits were generally at the same hour, the rattling of the bell was the signal for the dog's admittance. He paid these visits for several years, and was always received with great kindness. About two years ago on entering the house, he found the family caressing a beautiful little greyhound, and although they paid Spring the same attention as formerly, he showed his displeasure at the intrusion of the new favorite by growling and keeping at a distance. He would neither take tea cake nor sugar that was offered him, but went away sulkily, *and never returned by himself!*

Hanging among-t Crows.—The rookery in front of the Uxbridge Arms Hotel, in this town, was some time ago the scene of the most extraordinary occurrence, which has been related to us in the following manner:

One morning a solitary crow was observed advancing toward the place, and three of the feathered tenants of the said rookery sallied forth to meet the apparent stranger. The company having entered the hallowed precincts of the rookery, amidst a good deal of cawing, and other peculiar noises, the victim was pounced upon, and *vi et armis* borne to a tree, where his neck was firmly fixed between two branches, and while one of the executioners stationed himself above, the others rendered partial service by suspending themselves a dead weight to the feet of the unfortunate culprit. The work was soon accomplished, as life in a few moments became totally extinct. The carcass still remains dangling in the air, probably to serve as a warning for others. We are credibly informed that this summary mode of judidicial administration is by no means an unusual proceeding amongst these sagacious birds, several instances of the kind having been known to occur, in this identical rookery.—*Scotch Paper.*

Amalgamation.—A Texas paper tells a story of a man who by engrafting the black on the white grape succeeded in making "black, white, and speckled," grow on the same bunch.

Experiments in Butter Making.

The following valuable experiments are from an Essay on Butter Making, by Professor Traill, of Scotland, published, (we believe) by the Highland Agricultural Society. We copy from the Plough, Loom and Anvil, for May.

Experiments *to show the comparative quantity of butter yielded by*

No. 1. Sweet cream churned alone.

No. 2. Sweet milk and its cream churned together.

No. 3. Sour cream churned alone.

No. 4. Sour milk and its cream churned together.

No. 5. Scalded cream, or Devonshire cream churned alone.

On the 24th May, the milk of four cows was drawn into the same vessel, passed through a strainer, and then divided into five portions of six English pints each which was placed in similar basins of earthen ware, in a milk house the temperature of which ranged from 55 to 66 deg Fahrenheit.

Monday, 25th.—The temperature of the air was very hot, 76 deg.: but that of the milk house, by constant evaporation of water, was kept about 60 deg.

Tuesday, 26th.—Thirty nine hours after the milk has been drawn from the cows, it was removed from below the cream of No. 1. and No. 3, by a siphon; and we immediately began to churn the cream of No. 1, and the milk and cream of No. 2. in glass vessels.

No. 1. *Sweet milk churned alone.*—Having previously found that the addition of a small quantity of cold water to thick cream facilitated the separation of the butter, half a pint of water was added to the cream, and it was found that the temperature of the mixture at the commencement of the churning was 62 deg. In fifteen minutes, butter appeared in grains; the churning was continued for twelve minutes longer, i. e. twenty seven minutes in all, when the temperature of the whole had risen to 70 deg. The butter was now collected into one mass, but from the warmth of the weather, was very soft. It was, therefore, put into cold water, and placed in the milk house until the morrow, when it was worked and washed in the usual way, and weighed 1386 grains. It was of good color and perfectly well flavored.

No. 2. *Sweet Milk and its Cream churned together.*—The mixture of sweet milk and cream was churned at the same time; but, though cold water was here added, after one and a half hours churning, no butter was to be seen (in all for three hours,) but without our obtaining a particle of butter.

No. 3. *Sour Cream churning alone.*—On *Thursday 8th May*, the cream of No. 2, which had been separated on Tuesday, and placed in the milk house, was now slightly acid, and was churned after half a pint of cold water had been added to it. In twelve minutes butter appeared; and in eight minutes more, it had united into one mass. During the churning, the temperature of the cream had risen from fifty four to sixty-three deg. the butter milk was very poor, fit only for pigs. The utter, when well washed, and worked to separate the watery part, weighed 1756.5 grains. The color and taste were very good.*

No. 4. *Sour Milk and its Cream churned together.*—On the same day, *28th May*, the milk and cream which had become acid were churned together, and half a pint of cold water was added. It was fully fifty-seven minutes before any butter appeared; and before the churning seemed to be completed, one hour and fifty minutes had elapsed. This shows that much more time is required to churn milk and cream together, than to obtain the butter from cream alone. The butter was in this instance, diffused in small grains; and when washed and worked as long as any color was communicated to the water, it weighed 1968 grains. Its color was rather paler than the last, but its flavor was good. †

No. 5. *Clouted cream churned alone.*—On *Tuesday, 26th* the milk and cream of No. 5 were placed in a vessel of warm water, until the temperature of the milk rose to 159 deg. In these experiments on scalded cream we had the assistance of a Devonshire dairy-maid to superintend this part of the process. She generally placed the vessel containing the milk among the embers of a slow fire: but we preferred water as the heating medium. She judged of the due degree of heat merely by dipping her finger in the milk, and the wrinkling of its surface; and we found that the heat considered by her sufficient, generally ranged from 135 to 156 deg., and was occasionally as high as 160 to 162 deg. Fahrenheit. The milk was drawn from below the cream by a siphon; and the latter was placed in the milk house, until the following day, before it was churned. It was churned on Wednesday, the 27th. The milk of this portion was very poor, had a scalded taste, and would have been unsaleable.

I may here state, that by churning the milk of No. 1 and of No. 3, we could obtain a few more grains of butter, on some occasions; but we never could obtain the smallest quantity of butter from the milk of No. 5—so completely does the scalding process separate the butyraceous matter from the milk. The butter of No. 5 when well worked and washed, weighed 1998 grains. It had a rich yellow color, tasted agreeable, and was quite free from the peculiar scalded flavor of the milk.

Series 3.—This series, a repetition of the preceding experiments on the milk of four other cows, was commenced on Thursday, the 25th of June, or a month after the last series. As before the whole milk was mixed, strained, and divided into five equal portions, of six pints each, which were treated as the last.

No. 1. *Sweet Cream churned alone.*—On the 26th, or in twenty-four hours after the milking, the milk of No.

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* The butter milk from cream alone was poor and thin, in this and in all our experiments, whether water had been added to the churn or not.

† The butter milk from No. 4—that is from churning milk and cream together, when slightly acid, is a bland agreeable fluid, containing much albumen or caseine. It finds a ready market in towns, and is much used in Lancashire as an article of diet. It is therefore a valuable product, which ought to be considered in an economical point of view.

1 was drawn off by the siphon. The temperature of this portion, at the commencement, was 62 deg.; and when the churning was finished, had only attained to 65 deg. The churning required forty-five minutes. Water had been added as before; and the butter was obtained in grains like peas. When well worked and washed, it weighed 1137 grains. Its color was good and its flavor excellent.

No; 2. *Sweet Milk and its Cream churned together.*—The sweet milk and its cream churned together afforded no butter.

No. 3. *Sour Cream churned alone.*—On the 29th of June, the cream which had become sour, was separated by the siphon and churned. The temperature at the commencement was 58 deg.—and at the end it was 65 deg. The butter was fully formed in forty minutes, and united into one mass. Well worked and washed, it weighed 1247 grains. Its taste was good as was its color.

No. 4. *Sour Milk and its Cream churned together.*—At the same time, the sour milk and cream were churned, with the same precautions as before. The churning occupied two hours; when the temperature had risen from 58 deg fo 68 deg. When worked and washed the butter weighed 1447 grains. The quallities equalled that of No. 3.

No. 5. *Clouted Cream churned alone.*—The cream of this portion was scalded on Friday, the 26th of June, by being heated to 168 deg., which temperature it attained in one hour, the usual time required for this operation. On Saturday, the 27th, it was churned in forty-five minutes; during which process the temperature of the cream rose from fifty eight deg. to sixty-four deg. When well washed and worked, it weighed 1591 grains. The butter in the mouth had a granular taste, which we attributed to the heat rising, by mere accident, too high: by which an unusual portion of the caseine appeared to be separated with the cream. The butter had, however, no peculiar flavor from the procoss, although the milk would have been unsaleable, from a strong taste of scalding.

The general results of these experiments, confirmed by many similar trials, is, that the largest quautity of butter is produced from the scalded, or Devenshire cream; the next in quantity from the method of churning the milk and cream together, when they have become slightly acid: the third in quantity is afforded by by cream kept till it is slightly sour; the smallest quantity is obtained from the sweet cream. We were unable to obtain butter from churning sweet milk and cream together; and in several other series attempted it no more.

In one series of experiments we used as much as 11 1-2 Engligh pints of milk in each experiment; but we then had to churn in vessels of tinned iron; and we did not find the results so uniform as when operating on smaller quantities in glass vessels.

SERIES 4.—This series are intended to decide on the qualities of the butter obtained by the four processes above detailed, as to keeping fresh. These experiments were made, as those of the next series, on the butter obtained in most of our experiments. No. 1. always remained, when exposed freely to the air, longer without any rancid taste than any of the other kinds of butter. No. 3. and No. 4. were nearly on equality in this respect; if there was any difference it was in favor of No. 3. No. 5. became rancid more quickly than No. 3 or No. 4.

SERIES 5.—Equal quantities of butter obtained by the four processes were salted with equal quantities of salt, then spread thinly on glass plates, and exposed to the air in a dry room. They were inspected from time to time, and it was ascertained that the taint of rancidity always appeared in the following order, commencing with that which showed it first:

In No. 5, or butter from scalded cream.
No. 4, " " a mixture of sour milk and its cream.
No. 3, " " sour cream.
No. 1, " " sweet cream.

The cause of this difference in their power to resist decay was believed to depend on the varying proportions of caseine, or curdy matter in each. To determine this point, another series of experiments was undertaken.

SERIES. 6.—Two hundred grains of each kind of butter was kept liquified, by a moderate heat, in glass capsules; the oily matter was taken up by bibulous paper; successfully applied, as long as any oily stain was perceptable; the watery liquid which remained below the the oily matter was evaporated, and the solid residue, after being well washed, squeezed between the folds of blotting paper, and dried, was carefully weighed. Unfortunately I have been unable to recover the details of this series of experiments; but the following are the general results, which decidedly show that the presence of the greater quantity of casine in butter coincides with its greaer tendency to become rancid. The four kinds of butter afforded caseine in the following order, commencing with that which yielded most:—

No. 5, butter from scalded cream.
No. 4, " " acid milk and its cream.
No. 3, " " acid cream.
No. 1, " " sweet cream.

Experiments had been made in October, 1846, which proved that overchurning—that is, continuing the process after the full separation of the the butter—was very injurious to the quality of the butter, although it is increased in weight; and these, though made before the experiments detailed above, shall now now be indicated, as

SERIES 7.—The cream of Six English pints of milk was separated by a siphon, and churned in a glass vessel. The butter was formed in abont half an hour, but the churing was continued for about half an hour longer, when the butter had lost its fine, yellowish, waxy appearance, and had become pale and soft, while very little liquid remained in the churn. This butter was so soft that it could not be washed and worked, until it had remained some hours in cold water

tender and more juicy.

Indeed, no one is ignorant of the fact, that all domestic animals, males as well as females, deprived of their procreative organs, fatten more quickly than those that retain them; that the flesh of the spayed females is more tender and more delicate than that of males. The same phenomena take place among spayed cows that occur among other animals that have submitted to this operation; so, besides the advantage of furnishing a long continued supply, before commencing a course of fattening, of abundant milk, and butter of a superior quality, the cow fattens easily, and completely and a certain benefit follows this course.

3. In spaying decrepid cows, that is to say, of the age of from six to seven years—puny, small ones; those which, though fine in appearance, bear badly; those which frequently experience difficulty in calving, or delivery; those difficult to keep; and finally, all those that are "taurelieres," that is to say, constantly in heat—we have in addition to an abundant production of milk and butter, and a facility of fattening, the advantage of preventing a degeneration of the species, and moreover of avoiding a crowd of accidents, of maladies which frequently take place during after gestation, and to diminish those which happen during the period of heat.

Except under peculiar circumstances, we should take care in spaying the cow, that its teats have acquired their complete development, and that the milk has its proper qualities. The most suitable time is after the third or fourth calving.

Many societies of agriculture, impressed with the important results that this operation effects fix yearly, at their agricultural meetings, premiums for the encouragement of the spaying of cows. We doubt not that other societies who have not yet adopted this plan—not being convinced of its importance—when they are, will imitate their example. By this means, they bestow upon the country a new source of products.

We have been engaged for four years in researches upon this valuable discovery, and, we believe that it is incumbent upon us to state the results that we have obtained up to the present time.

In the number of 27 cows, age from six to fifteen years, that we have actually spayed, we have had the following results:

1. Increase of milk in cows of six years.

2. Constant production in those that have passed that age.

3. Milk richer than that of the cow not spayed, consequently more buttery, and the butter both of a uniformly golden color and having an aroma and taste far superior to that of a cow that has not undergone this operation.

Early in July, 1842, we obtained, as a subject of experiment, a cow from Brittany, of the small kind, twelve years old, calved about two months before, and which gave, when we obtained her, about six quarts of milk daily. The next day after we performed the operation of spaying, indeed the first eight days after that, the secretion of milk sensibly diminished, in consequence of the light diet upon which she had been put; but on the ninth day, the time at which the aure was complete, and the cow put on her ordinary food, the milk promptly returned to its former quantity, and she at the same time assumed a plumpness that she had not had previously. Customarily bringing together the yield of three days for butter-making, being eighteen quarts, it produced constantly two killograms of butter of the best quality. From the month of December to the following March, the quantity of milk diminished about one-third, and the butter proportionally, the cow during that time having been put on dry fodder. But as soon as we were able to turn her into pasture—about the beginning of April—the milk, after eight days of this new food, resumed its former course, and the animal continued daily to furnish the same relative amounts of milk and butter as before.

Three cows, two of which were fourteen years old, and one fifteen, have dried up two years after the operation, and at the same time promptly fattening, without increase or change of food.

One cow, eight years old, plentifully supplied with trefoil and cabbage, gave, a short time after the operation, a quantity of milk nearly double that which she gave before, although she was kept on the same kind of food. She has during a year continued to furnish the same amount, and has in addition fattened so rapidly, that the owner has been obliged, seeing her fatness, to sell her to the butcher, although she was still very good for milk.

Another fact, no less worthy of remark, we must not pass over in silence; and which goes to prove the superior and unchanging quality of the milk of the spayed cow. It is, that a proprietor having spayed a cow five years old, recently calved, with the special intention of feeding with her milk a newly born infant, the infant arriving at the age of six months, of a robust constitution, refused pap since it had accidentally been prepared with milk different from that of the spayed cow.

The other cows which had been spayed continued to give entire satisfaction to their owners, as well in respect to the quantity and quality of the milk, as also by their good condition.

Conclusion.—From what has preceded, it is fixed and irrefutable—

1. That spaying induces permanence of milk, increase of quantity, and improvement of quality, richer, more butter, superior color, finer taste and flavor.

2. The most suitable age is six years, and after the third or fourth calf.

3. The spaped cow fattens more easily, and furnishes beef of a better quality.

4. Cows that are bad breeders may be kept as good milkars, and the quality of good cattle kept up.

Six quarts of charcoal, finely pulverised and put into a cistern of the capacity of fifteen hogsheads, will make the water perfectly sweet at any time. Well worth the trial.

it was pale, still rather soft, and weighed 2566 grains. That this was beyond the due quantity of cream, was apparant when the comparative experiments on the same quantities of the same milk, but only churned till the butter was well formed, gave the following results:

The butter of No. 1 tasted insipid, never became firm and soon turned rancid. It wss found to yield a very unusual quantity of both caseine and watery fluid, which could only be separated by melting the butter.

Similar experiments were repeatedly made, the results of which showed that overchurning is very injuious to the quality of the butter; but it adds considerable to the weight of the article; and it appears to be frequently practiced in Lancashire, especially in manufacturing *fresh butter for immediate use.*

It is a common opinion in Lancashire that considerable more butter is obtained by adding hot water to the churn than by using cold water. We have invariably found that the addition of a small quantity of cold water, especially in summer greatly facilitated the separation of the butter, and rendered it more easily washed. But a dairyman informed us that the same quantity of cream, which will yield 14 pounds of butter with cold water, will afford 15 pounds, or even 15 1-2 lbs with an equal addition of hot water. This formed the subject of

SERIES 8.—On the 15th of November, we took from he mixed milk of four cows, two portions of six English pints each, and set them aside in the milk house, the temperature of which ranged from 59 deg. to 52 deg. On the 17th November, the cream was removed from each by the siphon, and churned at the same time, in circumstances as nearly equal as possible, except in the addition of water. The temperature of the cream, at the commencement of the churning, was fifty-five degrees.

No. 1. To this portion an ounce and a half of water at 45 deg., was added; butter begins to appear; two ounces more of water at forty-five deg., were added and the churning was carried on for five minutes more, The butter was then worked and washed.

No. 2. To this portion of cream one ounce and a half of water at 105 deg., were added; butter began to appear after churning for thirteen minutes, when two ounces more of water at 105 deg., were added, and the churning was continued for five minutes more, or eighteen minutes in all. The temperature of the contents of the churn was 71 deg. This butter was very soft, and therefore cold water was added, in which it was worked and washed.

Unfortunately, the note of the weight of the butter in this series has been lost; but I find it stated that the butter of No. 2 was rather more bulky, and weighed a little more than that of No. 1; that it neither was so firm nor of so rich a color as the butter of No. 1; and that on pressing it next day, some watery fluid escaped from it From this we inferred that the quality of the butter was deteriorated by the addition of hot water; and that the quantity obtained, by this practice, of marketable butter, is not so great as is commonly alleged in Lancashire, although the time of churning is somewhat abridged.

The principal results of the experiments above detailed, are—

1. That the addition of some cold water during the churning, facilitates the process, or separation of the butter, especially when the cream is thick and the weather is hot.

2. That cream alone is more easily churned than a mixture of cream and milk.

3. That butter produced from sweet cream has the finest flavor, when fresh, and appears to keep the longest without acquiring rancidity; but that the butter milk so obtained, is poor, and small in quantity.

4. That scalding of the cream, according to the Devonshire method yields the largest quantity of butter; which if intended for immediate use, is agreeable to the palate and readily salable; but if intended to be salted, it is most liable to acquire, by keeping, a rancid flavor. The process of scalding is troublesome; and the milk, after the removal of the cream, is poor, and often would be unsaleable from the taste it has acquired by heating.

5. That churning the milk and cream together, after they have become slightly acid, seems to be the most economical process on the whole; because it yields a large quantity of excellent butter and the butter milk is of a good quality—a point of some importance when buttermilk is largely used as an article of diet, as it is in Lancashire.

6. That the keeping of butter in a sound state appears to depend on its being obtained as free from uncombined albumen, or caseine, and water, as it can be by means of washing and working the butter when taken from the churn.

The Spaying of Cows.

Translated from the French for the Wyoming Co. Mirror.

The operation of spaying the cow is productive of great advantages.

1. The cow, spayed a short time after calving, that is to say, thirty or forty days afterward, and at the time when she gives the largest quantity of milk, continues to give the like quantity, if not during her life time, at least during many years, and at the time when the milk begins to dry up the animal fattens. We are able to add, moreover, at this day, certain facts, the result of many years' experiment, that the milk of the spayed cow, although as abundant and more so, than before the operation, is of a superior quality to that from a cow not spayed; that it is uniform in its character, that it is richer, consequently more buttery, and that the butter is always of a golden color.

We believe that we ought to remark, in passing, that if we feed the spayed cow too abundantly, lactation diminishes, and the beast properly fattens. It is, therefore, important that the feeding should not be more than sufficient to obtain the desired result.

2. The spayed cow fattens more easily; its flesh, age considered, is better than that of the ox. It is more

From Godey's Ladies' Book.

Gossip about Children.

BY LEWIS GAYLORD CLARKE.

My Dear Godey:—I love children. I used to think when I was a bachelor, (it is a good many years ago now,) that there was something rather presuming in the manner in which doating fathers and mothers would bring up their "wee things" around them, and for the special edification of us single fellows, cause them to "misspeak half uttered words," and to go through with divers little lessons in manners and elocution. But both parents and children were made so apparently happy by it, that I never could think, as certain of my irreverent companions were wont to think, and to say that it was "a bore." No I never thought or said that; but I did think, I remember as I have said, that there was a little bad taste and not a little presumption in such a course.

I don't think so now.

When a father—and how much *more* a mother—sees the first gleam of affection illuminating, with what the Germans call an "interior light," the eyes and features of his infant child; when that innocent soul, fresh from heaven, looks for the first time into yours, and you feel that yours is an answering look to that new born intelligence—then I say you will experience a sensation which is not "of the earth earthly," but belongs to the "correspondence" of a higher and holier sphere.

I wish to gossip a little with you concerning children. You are a full grown man now, friend Godey, quite full grown; yet you were once a boy; and I am well assured that you will feel interested in a few incidents which I am going to relate in illustration of my theme– incidents which I hope you will judge to be not unfruitful of monitory lessons to "children of larger growth" than mere girls and boys.

Don,t you think that we parents, sometimes, in moments of annoyance, through pressure of business or other circumstances, forbid that which was but innocent and reasonable, and perfectly natural to be asked for? And do not the best of parents multiply prohibitions until obedience to them becomes impossible.

Excuse me; but all your readers have been children; many of them are happy mothers; many more that are not will be in God's good time; and I cannot but believe that many who shall peruse these sentences will find something in them which they will remember hereafter.

"The sorrows and tears of youth," says Washington Irving, "are as bitter as those of age;" and he is right. They are sooner washed away, it is true; but oh! how keen is the present sensibility, how acute the passing mental agony!

My twin-brother Willis—may his ashes repose in peace in his early, his untimely grave!—and myself, when we were very little boys in the country, saw, one bright June day, far up in the blue sky, a paper kite, swaying too and fro, rising and sinking, diving and curveting, and flashing back the sun-light in a manner that was wonderful to behold. We left our little tin vessels in the meadow where we were picking strawberries and, ran into the neghboring field to get beneath it; and keeping our eyes continually upon it, 'gazing steadfastly toward heaven,' we presently found ourselves by the side of the architect of that magnificent creation and saw the line which held it reaching into the skies, and little white paper messengers gliding along upon it as if to hold communion with the graceful artificial 'bird of the air' at the upper end.

I am describing this to you as a boy, and I wish you to think of it as a boy.

Well, many days afterwards, and after various unsuccessful attempts, which not a little discomfitted us—for we thought we had obtained the "principle" of the kite—we succeeded in making one which we thought would fly. The air was too still, however, for several days; and never did a becalmed navigator wait more impatient for a breeze to speed his vessel on her voyage than did we for a wind that should send our messenger, bedizened with stars of red and yellow paper dancing up the sky.

At last it pleased the "gentle and voluble spirit of the air" to favor us. A mild south wind sprung up and so deftly did we manage our machine, that it was presently reduced to a mere miniature in the blue ether above us. Such a triumph! Fulton, when he essayed his first experiments, felt no more exultant than did we when that great event was achieved! We kept it up until "twixt the gloaming and the mirk," when we drew it down and deposited it in the barn—hesitating long where to place it, out of several localities that seemed safe and eligible, but finally decided to stand it end wise in a barrel, in an unfrequented corner of the barn.

I am coming now to a specimen of the "sorrows and tears of youth," of which Geoffrey Creyon speaks. We dreamed of that kite in the night, and, far up in the heaven of our sleeping vision, we saw it flashing in the sun and gleaming obaquely in the twilight air. In the morning; we repaired betimes to the barn, approached the barrel with eagerness, as if it were possible for the kite to have taken the wings of the evening and flown away; and on looking down into the receptable, saw our cherished our own beloved kite broken into twenty pieces!

It was our man Thomas who did it, climbing up on the hay mow.

We both of us "hated with a perfect hatred," for five years afterwards, the cruel neighbor who laughed at us for our deep six months sorrow at that great loss—a loss in comparison with which the loss of a fortune at the period of manhood sinks into insignificance. Other kites, indeed we constructed; but that was a kite "you read of," at "this present."

Think, therefore, O ye parents! always think of the acuteness of a child's sense of childish grief.

I once saw an elder brother the son of a metropolitan neighbor, a romping, roystering blade in the merest "devilment," cut off the foot a doll with which his infantine sister was amusing herself. A mutilation of flesh and blood, of bone and sinew, in a beloved playmate

could scarcely have affected the poor child more painfully. It was to her the vital current of a beautiful babe which oozed from the bran leg of that stuffed effigy of an infant; and the mental sufferings of the child were based upon the innocent faith which it held, that all things were really what they seemed.

Grown up people should have more faith in and more appreciation of the sentiments and feelings of children. When I read some months since, in a telegraph despatch to one of our morning journals, from Baltimore, if I right.y remember, of a mother who, in punishing a little boy for telling a lie—which after all, it subsequently transpired that he did not tell—hit him with a slight switch over the temple and killed him instantly—a mere accident, of course, but yet a dreadful casualty, which drove reason from the throne of the unhappy mother—when I read this, I thought of what had occured in my own sanctum only a week or two before; and the lesson which I received was a good one, and will remain with me.

My little boy, a dark-eyed, ingenuous, and frank-hearted child as ever breathed—though perhaps, 'I say it who ought not to say it'—still I do say it—had been playing about my table, on leaving which for a moment I found, on my return, that my long porcupine quill handled pen was gone. I asked the little fellow what had done with it. He answered at once that he had not seen it. After a renewed search for it, I charged him in the face of his declaration, with having taken and mislaid or lost it. He looked me earnestly in the face, and said—

"No I didn't take it, father."

I then took him in my lap, enlarged upon the hienousness of telling an untruth, told him that I did not care so much about the pen, and, in short by the manner in which I reasoned with him, almost offered a reward for confession—the reward, be it understood, (a dear one to him,) of standing firm in his father's love and regard. The tears had welled up in his eyes, and he seemed about to "tell me the whole truth," when my eye caught the end of my pen protruding from a portfolio, where I myself had placed it, in returning a sheet of manuscript to one of the compartments. All this may seem a mere trifle to you—and perhaps it is—yet I shall remember it for a long time.

But I desired now to narrate to you a circumstance which happened in the family of a friend and correspondent of mine in the city of Boston some ten years years ago, the history of which will commend itself to the heart of every father and mother who has any sympathy with or affection for their children. This is entirely true, you may be well assured. I was convinced of this when I opened the letter from L. H. B., which announced it, and in the detail of the event that subsequently furnished me.

A few weeks before he wrote, he had buried his eldest son, a fine manly little fellow, of some eight years of age, who had never, he said, known a day's illness till that which finally removed him hence to be here no more. His death occurred under circumstances peculiarly painful to his parents. A younger brother, a delicate, sickly child rom its birth, the next in age to him had been down for nearly a fortnight with an epidemic fever. In consequence of the nature of the disease every precaution hed been adopted that prudence suggested to guard the other members of the family against it. But of this one, the father's eldest, he said he had little fear, so rugged was he, and so generally healthy. Still, however, he kept a vigilent eye upon him, and especially forbade him going into the pools and docks near his school, which it was his custom sometimes to visit; for he was but a boy, and 'boys will be boys,' and we ought more frequently to think that it was their nature to be. Of all unnatural things, a reproach almost to childish frankness and innocence, save me from a "boy-man!" But to the story.

One evening his unhappy father came home wearied with a long day's hard labor and vexed at some little disappointment which had soured his naturally kind disposition, and rendered him peculiarly susceptable to the smallest annoyance. Whil he was sitting by the fire in this unhappy mood of mind, his wife entered the apartment, and said:—

"Henry has just come in, and he is a perfect fright; he is covered from head to foot with dock mud, and is as wet a drowned rat."

"Where is he?" asked the father sternly.

"He is shivering over the kitchen fire. He is afraid to come up here when the girl told him you had come home."

"Tell Jane to tell him to come here this instant" was the brief reply to this information.

Presently the poor boy entered, half perished with affright and cold. His father glanced at his sad plight, reproached him bitterly for his disobedience, spoke of the punishment which awaited him in the morning as the penalty for his offence, and with a harsh voice concluded with—

"Now, go to your bed!"

"But, father," said the little fellow, "I want to tell you———"

"Not a word, sir; go to bed!"

"I only wanted to say, father, that—"

With a peremptory stamp, an imperative wave of his hand toward the door, and a frown upon his brow, did that father, without another speech, again close the door of explanation or expostulation.

When his boy had gone supperless and sad to his bed the father sat restless and uneasy while supper was being prepared; and at tea table ate but little. His wife saw the real cause or the additional cause of his emotion and interposed the remark—

"I think, my dear, you ought at least to have heard what Henry had to say. My heart ached for him when he turned away with his eyes full of tears. Henry is a a good boy, after all, if he does sometimes do wrong. He is a tender-hearted, affectionate boy. He always was:"

And therewithal the water sood in the eyes of that forgiving mother, even as it stood in the eyes of Mercy

in the "house of the Interpreter," as recorded by Bunyan.

After tea, the evening paper was taken up; but there was no news and nothing of interest for that father in the journal of that evening. He sat for some time in an evidently painful revery, and then arose and repaired to his bed chamber. As he passed the bed chamber where his little boy slept, he thought he would look in upon him before retiring to rest. He crept to his low cot and bent over him. A big tear had stolen down the boy's cheek, and rested upon it; but he was sleeping calmly and sweetly. The father deeply regretted his harshness as he gazed upon his son; he felt also the "sense of duty;" yet in the night, talking the matter over with the child's mother, he resolved and promised instead of punishing as he had thereatened, to make amends to the boy's aggrieved spirit in the morning for the manner in which he had repelled all explanation of his offence.

But that morning never came to that poor child in health. He awoke the nex morning with a raging fever on his brain, and wild with delirium. In forty eight hours he was in his shroud. He neither knew his father nor his mother, when they were first called to his bed side, nor at any moment afterward. Waiting, watching for one token of rocognition, hour after hour in speechless agony, did that unhappy father bend ov- the couch of his dying son. Once, indeed, he thought he saw a smile of recognisation light up his dying eye, and he leaned eagerly forward, for he would have given worlds to have whispered one kind word in his ear, and have been answered; but that gleam of apparant intelligence passed quickly away, and was succeeded by the cold unmeaning glare, and the wild tossing of the fevered limbs, which lasted until death came to his relief.

Two days afterwards the undertaker came with the coffin, and his son, a playmate of the deceased boy, bringing the low stools ou which it was to stand in the entry hall.

"I was with Henry," said the lad, "when he got into the water. We were playing down at the Long Wharf, Henry, Charles Munford and I; the tide was out very low; and there was a beam run out from the wharf; and Charles got on it to get a fish line and hook that hung over where the water was deep; and the first thing we saw he had slipped off and was struggling in the water! Henry threw off his cap and jumped clear from the wharf, into the water, and, after a great deal of hard work, got Charles out; and waded up through the mud to where the wharf was not so wet and slippery; and then I helped them to climb up the side. Charles told Henry not to say anything about it, for if he did, his father would never let him go near the water again. Henry was very sorry and, all the way home he kept saying"—

"What will father say when he sees me to-night? I wish we had not gone to the wharf?"

"Dear, brave boy!" exclaimed the bereaved father, "and *this* was the explanation which I refused to hear!" and hot and bitter tears rolled down his cheeks.

Yes that stern father now learned, and for the first time, that what he had treated with unwonted severity as a fault, was bnt the impulses of a generous nature, which, forgetful of self, ha- hazarded life for ano her. It was but the quick prompting of that manly spirit which he himself had always endeavored to engraft upon his susceptible mind, and which young as he was, he had already manifested on more than one occasion.

Let me close this story in the words of that father, and let the lesson sink deep into the heart of every parent who shall peruse this sketch:

"Everything that I now see, that ever belonged to him, reminds me of my poor lost boy. Yesterday, I found some rude pencil sketches which it was his delight to make for the amusement of his younger brother. To day in rumaging an old closet, I came across his boots, still covered with dock mud, as when he last wore them. (You may think it strange, but that which is usually so unsightly an object, is now 'most precious to me') And every morning and evening, I pass the ground where my son's voice rang the merriest among his playmates.

"All these things speak to me vividly of his active life; but I cannot—though I have often tried—I cannot recall any other expression of that dear boy's face than that mute, mournful one with which he turned from me on the night I so rudely repulsed him. Then my heart bleeds afresh!

"O, how cureful should we all be that, in our daily conduct towards those little beings sent us by a kind Providence, we are not laying up for ourselves the source of many a future bitter tear! How cautious that neither by inconsiderate nor cruel word or look, we justly grieve their generous feeling! And how guardedly ought we to weigh every action against its motive lest in a moment of excitement, we be led to mete out to the venial errors of the heart the punishment due only to willful crime!

"Alas! perhaps few parents suspect how often the fierce rebuke, the sudden blow, is answered in children by tears, not of passion nor of physical or mental pain but of loving yet grieved or outraged nature."

I will add no word to reflection so true; no correlative incident to an experience so touching.

Hints to Husbands.

BY A WOMAN.

Do not jest with your wife upon a subject in which there is danger of wounding her feelings. Remember that she treasures every word you utter, though you may never think of it again.

Do not speak of some virtue in another man's wife, to remind your own of a fault.

Do not reproach your wife with a personal defect, for if she has sensibility, you inflict a wound difficult to heal.

Do not treat your wife with inattention when in company. It touches her pride—and she will not respect you more, or love you better for it.

Do not upbraid your wife in the presence of a third

person. The sense of your disregard for her feelings, will prevent her from acknowledging her fault.

Do not entert in your wife with praising the beauty and accomplishments of other women.

Do not, too often, invite your friends to ride, and leave your wife at home. She might suspect that you esteemed others more companionable than herself.

If you would have a pleasant home and cheerful wife pass your evenings under your own roof.

Do not be stern and silent in your own house, and remarkable for sociability elsewhere.

Remember that your wife has as much need of recreation as yourself, and devote a portion, at least, of your leisure hours, to such socie y and amusements as she may join. By so doing, you will secure her smiles and increase her aflection.

Do not, by being too exact in pecuniary matters, make your wife feel her dependence upon your bounty. It tends to lessen her dignity of character, and does not increase her esteem for you. If she is a sensible woman, she should be acquainted with your business and know your income—that she may regulate her household expenses accordingly. Let it be remembered that pecuniary affairs cause more difficulty in families than any other cause. Your wife has an equal right with yourself to all you possess in the world—therefore she should be made acquainted, as nearly as possible with that which is of so great importance to both. Do not withhold this knowledge in order to cover your own extravagance. Woman has a keen perception--be sure she will discover your selfishness, and though no word is spoken, from that moment her respect is lessened, her confidence diminished, her pride wounded, and a thousand, perhaps unjust, suspicions created. From that moment is your domestic comfort on the wane.

To Preserve Tomatoes.

Six pounds of tomatoes first carefully wipe,
Not fluted nor green, but round, ruddy, and ripe;
After scalding, and peeling and rinsing them nice—
With dext'rous fingers 'tis done in a trice—
Add three pounds of sugar, (Orleans will suit,)
In layers alternate of sugar and fruit.
In a deep earthern dish, let them stand for a night,
Boil the syrup next day in a very clean kettle.
(Not iron, but copper, zinc, brass or bell-mettle)
Which having well skim'd, 'till you think 'twill suffice
Throw in the tomatoes, first adding some spice—
Cloves, cinnamon, mace, or whate'er you like best—
'Twill add to their flavor, and give them a zest,
Boil slowly together until they begin
To shrink at the sides and appear to fall in;
Then take them out lightly, and lay them to cool,
Still boiling the syrup, according to rule,
Until it is perfectly clear and transulcent—
Your skill will direct you or else there's no use in't—
Then into the jars where the fruit is placed proper,
Pour boiling the syrup direct from the copper.
After standing till cold, dip some paper in brandy,
Or rum, or in whisky, if that is more handy;
Lay it over the fruit with attention and care,
And run on mutton suet to keep out the air;
And tie a strong paper well over the top—
And "now that I think on't the story may stop."
If you follow these rules, your preserves never fear,
Will keep in good order till this time next year. A. B.

The Old Mill.

Don't you remember, Lily, dear,
The mill by the old hill side,
Where we used to go in the summer time,
And watch the foamy tide;
And toss the leaves of the fragrant beach,
On its breast so smooth and bright,
Where they floated away like emeralds,
In a flood of golden light?
Lily, dear.

And the Miller, love, with his slouchy cap,
And eyes of mildest grey,
Plodding about his dusty work,
Singing the live-long day?
And the coat that hung on the rusty nail,
With many a motley patch,
And the rude old door, with its broken sill,
And the string with the wooden latch?
Lily, dear.

And the water-wheel, with its giant arms,
Dashing the headed spray,
And the weeds it pulled from the sand below,
And dashed in scorn away;
And the slippers, Lily, with moss o'ergrown,
Like sentinels stood in pride,
Breasting the waves, where the chinks of time.
Were made in the old mill's side.
Lily, dear.

Lily, the mill is borne away,
And a factory, dark and high,
Looms like a tower, and puffs its smoke
Over the clear blue sky;
And the stream is turned away above,
And the bed of the river bare,
And the beech is withered, bough and trunk,
And stands like a spectre there—
Lily, dear.

And the miller, Lily, is dead and gone!
He sleeps in the vale below;
I saw his stone in the winter time.
Under a drift of snow;
But now the willow is green again,
And the wind is soft and still;
I send you a sprig to remind you, love,
Of him and the dear old mill,
Lily, dear.

THE CROPS, DROUTH, &c.—For several weeks past our region of country has been affected with a severe and unusual drouth, the effects of which are plainly visible on the crops of corn, oats, and grass, and in the gardens The wheat harvest, however, is over, and we dont think the husbandmen of this county, with few exceptions, ever reaped a finer crop. The wheat crops are not only heavy and beyond the general average, but the berry is remarkably full and plump. Should we unfortunately be deprived of our usual quantity of other crops, we shall have plenty of wheaten bread, at rates that will be comparatively nothing in comparison with what we have been paying the past six months. Althongh our corn and oats crop may not be as fine as usual, yet there is scarcely a doubt but that fully as much if not more, will be produced, in the county, than has ever been done in former years, from the fact that a double quantity of ground has been put in cultivation. —[Globe, Coles co., Ill.

Agricultural Science

[Selected]

Soils contain, as a general thing, not more than one part in a thousand of the atoms, in an available condition, which nature consumes in forming a crop of any kind. This statement expresses a fact of great practical importance; for the husbanding of these fertilizing atoms is the first step towards arresting the impoverishment of the earth. It is the matter in the soil which makes crops in one arrangement of its atoms, and forms manure in another condition of the same atoms that the farmer should learn to preserve from waste and loss.

Soils of different degrees of productiveness, where their mechanical texture and physical properties are alike, always contain unlike quantities of crops. It seems to make little difference how small is the amount of the lacking ingredient in the composition of cultivated plants. Its absence is fatal to the further growth of the crop, after its appropriate aliment fails in the soil. It is easy to discover the wisdom of this universal law.—Suppose Nature should organize grass, grain and other plants which serve as the daily food of all the higher orders of animals, as well without bone earth—phosphate of lime—as without mineral. Would it be possible for such grass and grain to yield to the blood of domestic animals and to that of man himself, that solid earthly matter which imparts strength in human bones, and to those of oxen, horses, sheep, and swine? Certainly not. Although iron is always present in the food and blood of animals, no farmer ever killed a calf, a pig, or an ox, which had iron for the frame of its system. No anatomist ever saw a bone in the body of a person, formed of other earthly atoms than such as a Providence had fitted for this peculiar function in the animal economy.

The brains and muscles of all animals contain both sulphur and phosphorus as constituent elements. If their daily food, derived as it is from the soil, lacked either sulphur or phosphorus, must not this radical defect in their nourishment soon induce weakness and disease, and finally result in premature death? To prevent consequences so disastrous and so obvious, Nature refuses to organize plants without the presence in the soil, in an available form, of those peculiar atoms adapted alike to the wants of vegetable and animal vitality. This wise provision should be carefully studied by every one who desires to enjoy sound health, and a long and happy life. Most of "the ills that flesh is heir to," as well as most of plants, have their origin in the violation of Nature's laws.

The growth and constitutional vigor of all living beings, not less than the revolution of the earth on its axis, are governed by immutable laws. One of these appear to be, that an atom of carbon—charcoal—shall not perform the function of an atom of iron; nor can an atom of iron perform the office of an atom of carbon, or that of any other element concerned in the organization of plants and animals. There are only some fifteen kinds af elementary bodies used by nature in forming every vegetable and animal substance produced on the farm, in the orchard, or in the garden.

Tne science of Rural Economy consists in the systematic study of Atoms, and of the Laws by which they are governed, whether they exist in solid or crumbling rocks, in loose earths, in vegetable or animal mould in fermenting manure, in the living tissues and cells of organized beings or in the form of invisible gasses diffused through the atmosphere. Every product of agricultural labor is either a vegetable or an animal substance, and in its production not an atom of new matter is called into existence. In the language of science, all matter which is neither vegetable nor animal, including air and water, is mineral. All minerals are either solids, like sand, clay, and lime,—or liquids, like water, or gasses, like common air. The farmer deals largely with atoms in each of these forms,—hence he should be familiar with the several sciences which treat the natural phenomena as witnessed in the mineral, vegetable, and animal kingdoms. He should know that plants alone can subsist on mineral or disorganized food, that if there were no plants in the ocean nor on land, neither marine nor land animals could have a being. In the absence of all vegetation, it is obvious that allanimals must be carniverous, or cease to consume organized aliment. Being wholly dependent on mutual destruction for the means of subsistence, every day would diminish the aggregate supply of food; and the last animal would soon die of starvation.

From the above reasoning it is plain that vegetable life is older on this this planet than animal life; and that plants may have flourished thousands of years before the lowest type of a being which depended wholly on organized food for subsistence was created. It will also be seen that the line of demarkation between animals and plants is well defined, by the fact that the latter can organize the elements of all vegetable and animal substances, into these compound bodies, which the former cannot do. All plants produce and increase organized matter,—all animals consume and diminish the quantity of organized food.

The Hen Fever.

Few are aware of the extent to which the hen fever is now raging among our amateur farmers. The California fever sinks into oblivion when compared with this. Choice hens are now imported for breed. A few days since an invoice of thirty-five pounds came in the Robert C. Winthrop, from Liverpool. The merits of the Guil-

derland, the Dorking, or the Cochin China, are daily discussed in the railroad cars and at our fashionable hotels. One young farmer gentleman in our vicinity has gone into the fowl business in good earnest, and reduced it to a perfect system. Eggs are taken in to hatch for so much a head; the name of the owner of the eggs, and the date of their being laid written upon the outside. Hens are let to those who have eggs of a choice kind, but who have no hens to hatch them. Three and even four dollars per dozen is not an uncommon price for eggs of a choice kind.—*N. Y. Pap.*

Improvement of Domestic Animals.

Few are aware how susceptable of improvement is the living machinery which elaborates milk to every family in the Union. There is a realiable account in this report of a dairy of forty-one cows kept in the State of New York, which yields $62 in butter, cheese and milk, as the product of each cow a year. From the returns of the last State census, it is safe to say that 1,100,000 cows are now milked in the State, which are supposed to yield $20 per head. To improve these up to an average annual product of $31 each,—that is, one half what the best daires in the country now yield—would add $12,000,000 to the income of the citizens of a single State.

This gain by the improvement of one kind of rural machinery would be equivalent to creating a capital of $200,000,000 and placing the money where it would yield over six per cent. interest in perpetuity. If the 30,000,000 of sheep in the United States gave as good returns for the food consumed; as the best 100,000 now do, it would add at least sixty million lbs. to annual clip of this important staple.

In one of his letters to Sir John Sinclair, General Washington says in substance, that at the time he entered the public service in the war of the Revolution, his flock (about 1,000) clipped five lbs. of wool per fleece. Seven years after, when he returned to his estate, his flock had so degenerated that it gave an average of only two and a half lbs. per head, which was the common yield of Virginia sheep then as it is now.

Although the numerous importations of superior sheep, cattle, horses, and swine, have greatly benefitted the country, it must be admitted that much has been lost by suffering improved animals to deteriorate. Every wool grower should ponder well this fact. If 2 1-2 lbs. of will pay the whole cost of keeping a sheep a year, 5 lbs. will pay one hundred per cent profit on that cost.

Washington was eminently a 'book farmer,' and was anxious to gain knowledge fram the educated agriculturists of Europe and of his own country. His overseer believed in keeping sheep as his father did, and was opposed to all innovations in husbandry.

There are now not far from 6,000,000 horses and mules in the United States; and it is not too much to say that in a few generations, these animals may be improved full $30 a head on an average. If so, the gain by this increase of muscular power, and its great dnrability, will be $180,000,000. If we study critically the machinery for converting grass, roots and grain, into beef and pork, the difference is found to be still more striking. If the facts relating to the subject were spread before the people, great improvements would soon follow, and all classes share equally in the profits of more productive labor.

—o—

Ohio Agricultural Fair.—We learn from Mr. Lapham, who has the preparation of the ground in his charge, that the work is progressing rapidly. The enclosure will contain 15 acres, and the workmen are making rapid progress towards its completion. Every thing will be in readiness by the time of the Fair, and on a most liberal and extensive scale. Already Mr. Lapham has received letters from some 150 of those appointed on the committees, accepting their appointment. The prospects from all quarters are encouraging.—*Ohio Statesman.*

—o—

Belcher's Sugar Refinery, at St. Louis, is conducted on a very extensive scale. The product of its operations this year, in manufactured sugar and syrups, will amount in value to about nine hundred thousand dollars. In the month of May last, eight hundred tons of raw material were worked up and made ready for the market.

—c—

Peacaes.—It is said that the peach crop will be immense this year. The dealers in this delicious article are down in the mouth at the prospect of having a heavy crop on hand. To meet this difficulty, some of the peach men in the vicinity of the Sand Hills are erecting very large and extensive drying sheds, calculated to cure fifty bushels at a time. The lovers of peaches may felicitate themselves on the prospects of abundance, if the dealers are a little fearful of their profits. The quality of the fruit is, of course, likely to suffer some, from the overloading of the trees.—*Trenton (N. J) State Gazette.*

Western Emigration.—The Prairie du Chein Patriot, of the 5th inst., is of the opinion that every body is not going to California; for many persons are passing through that place, some of whom are destined for the northern part of Iowa, and others, for the nothern part of that county. Many of them are Norwegians and are apparantly in good circumstances. The Patriot is further of the opinion that the northern part of Wisconsin and Iowa will, this year, receive a larger accession to their population than in any previous year.

A Strange Freak of Nature.—A curious freak of Nature may be seen on an apple tree in Medford in the yard of Mr. Nathan Childs. Upon this tree, there are *three white roses.* Originally there were five, and what is still more singular is, they are all upon a new sprout of this year's growth.—*Portland Advertiser.*

Large Yield of Wool.—Samuel Rockwood, of Arkwright, sheared from three sheep last week, *thirty-eight pounds of good wool.* Mr. R. sheared a trifle over the same amount from the same sheep last year. The sheep are the common native breed.—*Fredonia Censor*

EDITOR'S TABLE.

Traveling Agents.

The following persons have been commissioned as Agents for the Valley Farmer:

G. H. WILSON, for Missouri, northern Illinois, and Iowa.

A. R. HAYNES, for Northern Illinois and Iowa;

J. W. BARLOW, of Burlington, will also act as General Agent for Iowa and vicinity.

City Agent.—Mr. Sidney Smith is authorized receive subscriptions for the Valley Farmer and receipt for the same.

☞Some of our subscribers are still in arrears for the first volume. We hope they will not delay to remit the sums due. All arrearages should be sent to our address [E. Abbott,] and may be remitted by mail at our risk.

St. Louis Horticultural Society.—The regular monthly meeting of this Society, held on the 6th inst., was very well attended, and possessed an unusual degree of interest, promising well for the future prosperity of the association.

A very creditable display of Fruits, Flowers, &c. was made, by which more than one of our senses were regaled. It consisted of the following lists:

By Mr. Sigerson.—Two superb hand bouquets; Osage Orange shoots (this year's growth;) Rhubarb; Rye Grass (Wild Rye;) Oats; Timothy; Blue Grass; Wire Grass; Hollyhocks, 20 varieties; Dwarf Horse Chestnut; American Chestnut.

By Mr. Turner.—One quart Raspberries; one quart Red Currants; one quart Black Currants; one quart Black Currants; Specimen of the Yucca Fillamentosa; 4 varieties of Lettuce, raised from seed presented to the Society by Major Lee, and 4 cucumbers from the same lot of seeds.

To the Raspberries and Red Currants exhibited on this occasion by Mr. Turner, were awarded the respective premiums offered by the Society for those fruits.

By Mr. Robinson.—Superb Hand Bouquet, containing sixteen varieties hardy roses; Montmorency Cherries.

It was voted to send three delegates to the National Fruit Grower's Convention, to be held at Cincinnati, in September next, and the President, James Sigerson, and D. B. Hill were appointed said delegates, with power to fill vacancies.

The Council were instructed to present at the next meeting of the Society a definite report of an appropriate manner of conducting the Fall Exhibition, which it is intended shall partake of the character of a Floral and Pomological festival.

In fulfilling these instructions we understand the Council will recommend that the exhibition be held in some one of the beautiful groves in the environs of the city; that a pic nic be prepared; a band of music engaged, and that the day be devoted to social and intellectual enjoyment. We predict it will be the most popular [illegible]

Elements of Scientific Agriculure, or the connection between Science and the Art of Practical Farming. Prize Essay before the New York State Agricultural Society. By John P. Norton, M. A., Professor of Scientific Agriculture in Yale College. Albany: Erastus H. Pease & Co., 82 State street. Cincinnati: Jacob Ernst, 183 Main street. 1850.

We acknowledge our indebtedness to the publishers for a copy of this useful work, which we look upon as one of the most valuable contributions to Agricultural literature that has emanated from the press for a long time. It is an elemental work, written with great clearness, and embracing matters of much importance to every cultivator of the soil. It treats of the properties, constituents, uses, and offices of the various substances which comprise soils and their products; the several kinds of manures and their specific actions; the composition of plants; the rearing and feeding of animals the management of milch cows and the dairy; the fattening of cattle; the nature of chemical analysis; the application of geology to agriculture, &c., &c.

We copy from the initial chapter, the following paragraphs upon what constitutes

A GOOD FARMER.

The good farmer desires to grow large crops with the least necessary cost, but at the same time never forgets that it is the best economy to keep his land in good condition and even improving. In order to accomplish this, he must do something more than merely plow and harrow, sow, plant, and reap: he must think and study also. He must learn the nature of the various crops he raises or wishes to raise: these crops differ; he should seek to understand the differences, and how they are caused. One field he will find to vary much in its nature from another, a certain crop grows here, and fails there: are these things accidental, or can he discover the reasons? In adding certain substances called manures to the soil, he finds diverse effects, not only in their application to different fields, but also to different crops. Here is another subject for study. His animals thrive on some kinds of food, and derive little benefit from others. A small bulk of some varieties sustains and increases their size and strength, while upon great quantities of other varieties they grow poor. What are the properties upon which these effects depend?

Thus we perceive that the farmer who really wishes to understand the "*art of cultivating the soil,*" must go a long way beyond plowing. He must, it is true, know how to get his soil into a good state; but he must also know something as to the nature of his crops, of the various soils on which they grow, of the manures which are applied to increase that growth, and of the food which he supplies to his animals.

This, it may be said, involves too much study for a practical working man. I reply that it is not necessary for him to learn the minute details of scientific researches and discoveries. It is enough to begin with the leading principles that have been established; with these he will be able to work more intelligently than ever before, and go on continually adding to his knowledge.

Water-Cure Journal

PROSPECTUS OF VOLUME IX. FOR 1850.

THE WATER-CURE JOURNAL is published monthly, containing thirty-two octavo pages, illustrated with engravings, exhibiting the Structure, Anatomy and Physiology of the Human Body, with familar illustrations to learners. It is emphatically a journal of health, adapted to all classes, and is designed to be a complete family guide, in all cases, and in all diseases.

Philosophy of Health.—This will be fully discussed, including food, drinks, clothing, air, and exercise, showing their effects on body and mind.

To Invalids.—No matter of what disease, the principles of hydropathy may be applied, and in nine ont of ten, great benefit may be derived therefrom.

Water-Cure at Home.—Particular directions will be given for the treatment of ordinary cases at home, which may enable all who have occasion, to apply without the aid of a physician.

TERMS.—ONE DOLLARS A YEAR IN ADVANCE.—☞Please address all letters, post-paid to the publishers.

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PROSPECTUS OF

THE STUDENT.

A Family Miscellany and Monthly School-Reader, Volume I. (New Series) commencing in May, 1850, N. A. CALKINS, EDITOR.

This work is published monthly at ONE DOLTAR a year in advance, containing THIRTY-TWO large octavo pages, and intended to supply Families and Schools with valuable reading, combining interest with instruction, and so arranged as to be *adapted to all*. It is devoted to the Moral, Intellectual, and Physical improvement of Youth, embracing the *Natural Sciences*, including Astronomy, Botany, Geology, Chemistry, Physiology, and Natural Philosophy, and all important discoveries made from time to time in each.

Biography of distinguished persons, illustrated with handsome portraits, will hereafter form one interesting feature of the work.

Natural History, giving a familiar descriptionof animals, and their habits, illustrated by beautiful cuts, will continue to appear in the Youth's Department.

History, in its leading features, of our own and o her countries, wi l be found in our columns, thus keeping the reader advised of the principal changes and discoveries taking place among the different nations.

Phonography will be advocated in the Student, and a series of lessons given for those who may wish to examine, or learn this method of writng by sounds—the best system of reporting.

Music, to relieve the tedium of study, and cheer up the youthful spirits, or gladden the happy home, will be given each month, accompanied with a pleasant song.

Drawing, will continue to be made an object of interest to the little hands which have already engaged in this pleasing employment, and the tens of thousands who may commence during the present year.

To Teachers. We shall continue to devote a page to you, containing the most useful suggestions of experienced teachers, and many valuable hints in regard to your duties. You have our warmest sympathies, and to you we look for much assistance in enabling us to aid in your labors, and improve those instrusted to your care.

For Children, some five or six pages will be printed on large and plain type, containing articles written with easy words and simple ideas, to instruct the child, and teach some moral lessons or facts in nature, thus

"To aid the min 's development."

The Youths Department, comprising some ten pages, will contain narratives, travels, illustrated descriptions of animals, poetry, and articles on scientific subjects, adapted to the capacity of the young—just suited

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To breathe the enlivening spirit."

Such a variety The Student presents in its monthly visits. It has a word of encouragement for all who desire improvement. Our enterprise is a novel one, and the plan of our work unlike any other that has ever been offered to the public. Our aim is to present

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THE STUDENT is edited by N. A. CALKINS and published by FOWLERS & WELLS, 131 Nassau street, New York, on the following terms, in advance:—Single copy, one year, $1; five copies, $4; eight copies, $6; fifteen copies, $10. Please address all letters, post paid, to

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THE GREAT ARMENIAN SALVE, made from Vegetables. This valuable discovery to the human family has been known to the proprietor for thirty years. Thousands have been relieved from pain and suffering, and some of the most extraordinary cures performed. It has been tested in Asia and Europe, in actions on the Ocean, on battle field, gun-shots, poisoned arrows, in Hospitals in London and by the late Sir Astley Cooper, K. B., and on this continent. Several of the faculty of N. York city, of high standing and reputation, and several private individuals of Mobile, Ala, and this city, all pronouncing it invaluable. This salve will also cure old sores, ulcers of long standing, tumors, fistulas, gangrenes, &c. &c., in a short space of time—from five to fifteen days—with little or no pain to the patient. Also, mortification checked immediately.

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Only survivor that makes it in the United States.
feb

PAYNTER'S ARMENIAN TONIC, FOR the removal and permanent cure of all diseases known to the human family, arising from an impure state of the blood, viz: Persons laboring under inward complants, Rheumatism, Dropsy, Hysteria pains of the bones and joints, and affections of the lungs, and all those affections which females are liable.

Corea have been cured with this Tonic, by Dr's Bush and Rawlingser, of New York, and Dr's Williams and Reed of Canada, after the failure of purgative and metalic Tonics.

☞Prepared and sold by C. T. PAYNTER, 227 North Fifth street, St. Louis, Mo. Put up in pint bottles, and sealed.
feb

PAYNTER'S EGYPTIAN ASIATIC CURE FOR CHOLERA AND DIARRHOEA—Emigrants going outh or across the plains to California, will do well to take a few bottles of Panynter's Egyptian Asiatic cure for Cholera and Diarrhoea. It is one of the best medicines that can be taken. It has saved life, when all other preparations have failed. Health is one of the great blessings to man, Therefore don't go without it—be sure to get the genuine Asiatic made by C. T. Paynter, 227 North Fifth street, and sold by George Myers 22 Vine st.; Ellis' Grocery, corner of Second and Chesnut sts.; J. Brookie. Druggist. corner Morgan and Broadway, and Comstock & Bro., corner of Third and Pine streets.
feb C. T. PAYNTER.

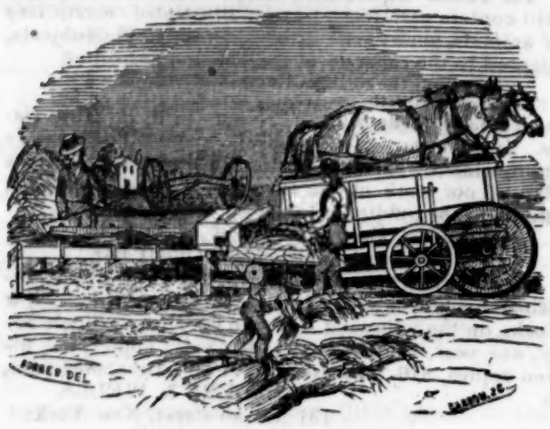
DR. J. BULGIN'S WEST INDIAN RAT DESTROYER, made and sold by his Agent, C. T. PAYNTER. St. Louis, Mo. feb. 1850.

FRUIT TREES.

The subscriber has about 40,000 APPLE TREES, consisting of over One Hunred choice varieties, many of which are of a large size for transplanting. Also, a small stock of Pear, Peach, Plum and Apricot trees, Grape vines and Shrubbery. The price of Apple trees will be $7 per 100 trees, or $60 per 1000, and the purchaser have his choice of trees. Other varieties 10 cents pr tree or vine, and shrubbery five cents each.

For distant customers I shall hereafter carefully pack and forward to Warsaw for reasonable charges. It will be for the interest of those who think of ordering trees this fall to do it early. Such as order trees can send good current bank notes, out from those who come for trees I shall want the SPECIE. Catalogues with further particulars sent to those who apply. JOHN SLATER.

St. Albans, Hancock Co., Ill., Sept. 7, 1849.



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THE subscribers, Proprietors of the Patents for these Machines, and manufacturers of them, having recently increased their facilitie for manufacturing,are now prepared to fill orders for machines, and to establish and supply agencies, to any extent that may be desired.

These machines are favorably known wherever they have been used or exhibited. They have taken premiums at many different State and County Fairs held in Massachusetts, New York, New Jersey, Pennsylvania, Ohio, and also in Canada, never having competed for premiums without success and flattering commendations.

As many as two thousand of them are now in use, of which over 500 were sold the past season.

The accompanying cut gives a view of a two horse machine at work, with the hands necessary to attend it. It will thresh from 155 to 200 bushels of wheat or twice the quantity of oats per day. The one horse power or single machines thresh rather more than half as fast as the double ones.

These horse powers are strong and durable, and run extremely light. With one end of the power slightly elevated, (as represented in the annexed cut.) the weight of the horse alone affords sufficient power to thresh at the rate before stated, or to drive circular and upright saws, or any other machines used by farmers requiring propelling power.

The Overshot Thresher takes the grain from a level feeding table or apron, (of a proper hight to allow the feeder to stand erect and feed, without annoyance from dust.) and passes it through a toothed or spiked concave or bed, placed over the cylinder, and at the same time so varying the inclination of the spikes so as to set the machine for threshing tough or damp grain or short oats, and resetting it at pleasure, for long rye or wheat, or oats in good order, or for timothy grass or clover, and all this is accomplished without stopping the machine, so simple is the process. By means of the Separator the straw, as it comes from the Thresher, is effectually separated from the grain.

The Power Thresher and Separator, complete, for either one or two horses, is easily loaded on a common farm wagon; but where frequent moving is desired, the two horse machines are placed on wheels in such a manner that when used for threshing the forward wheels are removed, dropping that end of the power, and leaving the opposite end elevated on the other axle, ready to receive the horses. By this arrangement (which has been made for the convenience of those who make threshing a business and for partnership machines) two men can with ease get a two horse machine ready for work in fifteen minutes, and reload it for moving in the same time.

W., M. & Co. also manufacture Stalk, Hay and Straw Cutters, to be used with their horse powers; and also Circular Saws and Benches, for cutting ordinary fire wood, and locomotive and other fuel.

Every machine made or sold by W., M. & Co., or their Agents, is WARRANTED to work to the satisfaction of the purchaser, or it may be returned to them, or to the agent of whom it may have been purchased, within sixty days, and the purchase money, (if paid) will be refunded.

These machines are so light, compact and easily handled as to admit of transportation to any part of the country with trifling expense—the weight of the two horse machine, complete, being less than 2,000 pounds, and of the one horse about 1,200.

The manufacturers are now establishing agencies in all parts of the United States and Canadas, where they are needed to facilitate the sale of these machines. Good agents are wanted in the Southern and Western States and the Canadas, to whom liberal commissions will be allowed. Our agents as far as definitely ascertained are—

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EPHRAIM ABBOTT,
Editor Valley Farmer, St. Louis, Mo.

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☞Partciular attention paid to orders from the country, for the purchase of Groceries or any article in this market. Cash advances on property for sale or shipment. July. 1849.

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JAMES DONNEL respectfully acknowledges to his friends and the public generally, their liberal support, and informs them that he can always be found at the old stand, No. 12 North Third st. between Market and Chesnut streeets, where he is prepared to execute all orders in his line. Having long experience in the business, warrants him in assuring his patrons full satisfaction in any work that may be entrusted to him. Particular attention given to Sign and Ornamental Painting, decorating of Churches, Glass Staining, &c. &c.,

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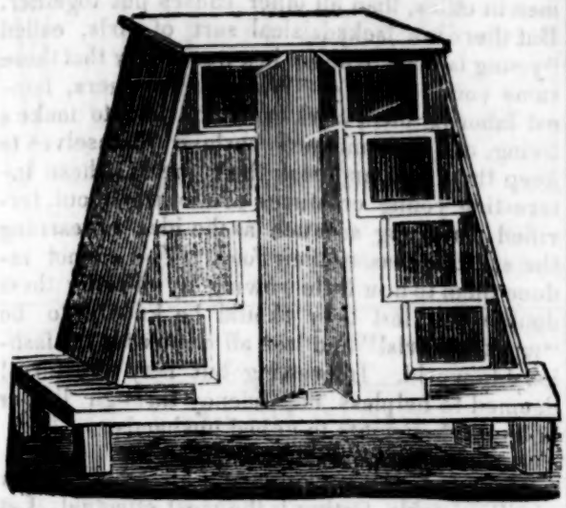
THREE months' extra Pay, and One Hundred and Sixty Acres of Land will be procured for all who enlisted for five years, or during the War of 1812, and for all, including Volunteers who served in Mexico, and for the heirs of all who have died in the service.

Information will be given to relatives, Free of Charge, by writing, postage paid, to G. F. LEWIS,
Detroit, Michigan.

Those who do not know what became of their friends, write when and where they joined the army. [Jan. '50-6m*

Colton's Patent Bee Hive.



THE undersigned, proprietor of this celebrated Bee Hive, for Missouri and Iowa, will dispose of individual. township, or county rights, on very advantageous tems. Full directions for constructing the hives, and managing the bees, furnished to purchasers. C. SIMPTON.

St. Louis, Jan., 1850.

From Governor Slade.

I have examined a Model and Specification of Mr. AARON COLTON's Improved Bee Hive, for which he has obtained Letters Patent. By an ingenious contrivance particularly adapted to the habits of bees, Mr. Colton leads them, as they descend in their work from the top of the hive to carry the ork into the boxes attached to its sides. His hive seems to e a decided improvement on any that I have before seen.

WILLIAM SLADE.

Middlebury, Vt., January 20, 1846.

From Gov. Eaton.

Having examinedja model of Mr. AARON COLTON's Improved Bee Hive, for which he has a Patent, under date of December 31st, 1845, I am prepared to say, that I regard it as at once a very ingenious and useful contrivance. It is so fashioned, in accordance with the principles deduced from the well known habits of bees, as to stimulate these interesting little animals to the highest degree of industry, while at the same time it affords them ample room for their labors.

I have seen other ingenious contrivances in the shape of Beo Hives, which, from a lack of a perfect adaptedness in their mechanical construction, to the habits or the instincts of the animals for whose use, as a work-shop, they were intended, have failed of answering the purpose for which they were designed.

But in view of the correct principles which have governed in the construction of Colton's Hive, as well as the facility and convenience with which it can be managed, I believe it is superior to anything of the kind with which I am acquainted. HORACE EATON.

Enosburgh, Jan. 30th, 1847.

The Special Committee appointed at the New York State Fair, at Auburn, Sept. 1846, in their report, speak as follows:

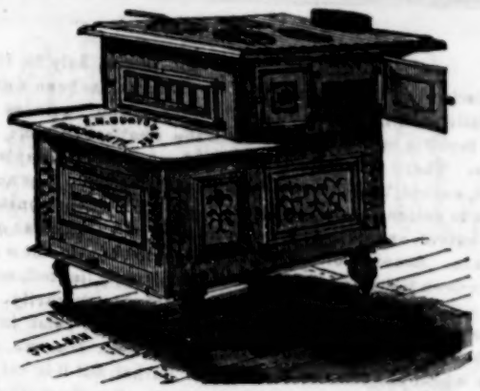
"The Committee unanimously recommend the award of the following premiums:

"To Aaron Colton, of Pittsfield, Vt., whose hive contains more advantages than any other with which we are acquainted, (1st premium,) $5 00.

"The simplicity of this hive, the pyramid form of the main chamber for the bees, and the application of the drawers for the pure honey, warrant us in cheerfully recommending this hive to the public." ROSWELL G. PIERCE, R. BURNELL, AHIRA ELDRIDGE, } *Committee.*

It also had the first premiun. awarded on the improvement at the bottom of the hive, at the New York State Fair, held at Buffalo, in Sept. 1848, and has taken the first premium at all the County Fairs where it has been presented.

The Editor of the Valley Farmer has been authorised by the owner of the patent to dispose of family rights, which he will do on reasonable terms; he will also furnish single hives at the patentee's prices. Full directions for constructing the hive and managing the bees furnished in all cases. Address, "Ephraim Abbott St. Louis, Mo."



BUCK'S

Improved Patent Cooking Stove.

The subscribers have now on hand, in addition to their former stock,

FOUR SIZES OF BUCK'S IMPROVED COOKING STOVES,

to which we respectfully call the attention of all persons who wish to economise in the use of fuel, and who regard a good stove as better than a poor one. We offer the stove confidently as the best now in use, not only as a fuel saving machine, but one which by its capacity, durability, simplicity and perfectness, is adapted in all respects to the use of the kitchen. This stove combines all of the Buck stove, so well and so favorably known, together with another oven, with new and beautiful air tight patterns; the oven is nearly twice as large as that of any other stove in use, with flues to carry off all the steam arising from cooking of various kinds of meats, pastry, &c., and thereby preventing the mixture of flavors so much complained of in all other stoves, except Buck's Patent. The oven is warranted to bake as well and as quick as a brick one, and with less fuel, than any stove of like capacity. Wherever this stove has been introduced it has obtained a decided preference over all others, and will be found by any one giving it a fair trirl, to possess such unequalled excellences in performing all the operations of cooking, and so great a saving of both labor and fuel, as to make it the interest of every family to posses one. The reputation of Buck's stove has been constantly increasing and extending so that stove inventers now find it neccessary, in order to sell their wares, to copy as nearly as possible the form, and, then by diligent efforts, attempt to palm off their productions on the public as an improvement on Buck's Patent. The fact that such is the case shows that in their estimetion Buck's stoves have a reputation beyond any thing else in the shape of a cooking apparatus. The Buck stoves are warranted to bake even at top and bottom, and to opperate well in every respect. The Buck stove is sold only by the subscribers in St. Louis.

We have also on hand all the former paterns of Buck's Patent Cooking Stoves now so generally in use and preferred to any other by all who use them. together with Improved Premium Air-tight Parlor and other stoves; box Coal, 6, 7 and 10 Plates. with the various paterns usually kept in this market, which we offer wholesale or retail, at the lowest market prices. BUCK & WRIGHT,

209 Main st., opposite Missouri Hotel.

For the operation of Buck's Stove, we respectfully refer to the following persons, with hundreds of oth-ers, who have them in use:—

J. & W. Finney,	Roe & Kercheval,	Mrs. Denison,
C. W. Pomeroy,	Elliot & Harriott,	Mrs. Cheeny,
Fife & Kerr,	Jesse D. Lindell,	Mrs. Dean,
Geo. Pegram,	Judge Wash,	Geo. Partridge,
Dr. R. P. Chase,	Wm. Humphreys,	W. C. Lacy,
Dr. Edwards,	W. H. Pocock,	Spencer Smith,
Dr. Weble,	M. Wygant,	N. Ranney,
Jno. B. Camden,	L. & J. Sherman,	D. J. Hancock,
Moses Forbes,	Miss Woodland,	T. O'Flaherty,
W. T. Christy,	J. E. Woodruff,	Geo. Cable,
Samuel Treat,	J. Rosnbaum,	Norman Cutter.

August, 1849.

James S. Pool,

Locust strcer,

GOLD and SILVER LEAF, Dentists' Gold and Silver FOIL manufacturer, Agent for Stockton's Incorruptible Teeth, north side Locust street, between Fourth and Fifth streets, St. Louis.

Also, furnishes Regalia, Emblems and Stars for the Sons of Temperance and the Temple of Honor, from patterns [illegible]

Commercial.

St. Louis, July 20, 1850.

During the whole of the past month there has been a gradual falling off in the receipts of produce, and business upon the levee is now confined within the smallest possible compass. There is very little demand for any of the staple articles, except Tobacco, and even in this we have less animation to notice. Receipts have fallen off to a very considerable extent; and dealers look forward to an early close of the season. Receipts of wheat, in anticipation of the new crop, have been light, and the demand exceedingly limited, most of the millers having retired from the market temporarily. New wheat, of an excellent quality is beginning to come in, and all hands are anticipating a heavy business season. Good new wheat has commanded 80c. per bushel, but it is not supposed that this price can be maintained, after the market becomes stocked.

TOBACCO—Prices remain as high as at any time of the season, with a very active demand and limited supply. Sales have been made within a few days at prices from $2 55 for damaged refused to $7 15 for passed leaf, per 100 lbs.

HEMP—Inferior to fair, dew rotted, $75a$85, good to prime $86a$90, choice $93 per ton. Supplies are small, but market firm.

WHEAT—Mixed and spring wheat 60c. a 70c; fall 80c. a 85c. sacks returned. Not much doing at present, as receipts are very limited.

FLOUR—We quote common to fair country brands at $4¼ a$4¼; choice do $5a$5¼; City mills $6a$6¾ per bbl. Market dull, with a downward tendency.

CORN—56 a 65 cts. per bushel, sacks included. Trade dull; but little being taken for shipment.

OATS—50a54 cents, sacks included. In demand.

PORK—Prime $7 75 a $8 00; Mess $10 25 a $11; clear $12 per bbl. Demand very light

BACON—Shoulders 2 a 2¼; sides 4 a 4¼; hams 5 a 5¼; canvassed 6¼ a 8.

BUTTER—According to quality, from 7 to 18 cents per lb. as usual. At retail, good table butter has been selling at 15a 20 cents per lb.

LARD—$6 a $7 per 100 lbs.

CHEESE—6¼ a 7 cts. per lb.

SALT.—G. A. $1 35 a $1 45 per sack; Kenawha 3c. per bu.

GROCERIES—Rio Coffee, 10 a 11 cents, wholesale, and in demand; sugar 5¼ a 5¾ c. do; molasses, 33 a 34c. do.

DRIED FRUIT—Apples $2 00 a $2 50; Peaches $2 a $2 25 per bushel. Retail prices.

GREEN APPLES—$0 a $0 00 per bbl.

CASTOR BEANS—$1 75 per bushel.

POTATOES—00 cents a $0, at retail.

COTTON YARNS—19¼ a 20 c by wholesale.

HOPS—18 to 22 per lb.

BEESWAX—19 a 22¼c.

FLAXSEED—$2 per bushel, a retail.

CLOVERSEED—$4 25 a 4 50c per bushel, at retail.

TIMOTHY SEED—$2 75 a $3 per bushel, at retail.

HEMPSEED—$1 50 a $2 per bush.

BLUE GRASS—Stripped, $1 a $1 25 per bushel; clean $1 75 a $2—retail prices.

TALLOW—5 to 7c per pound.

HIDES—Dry salted 7 a 8c., green 3 a 3¼c per lb.

CASTOR OIL—$2 a $2 10 per gallon.

HAY—50 cts per 100 lbs.

FEATHERS—26 a 30 cts. per pound.

EGGS—10c. per doz. by the bbl., at retail 15 cts.

WOOL—Good to fine tub-washed 25 a 30c. per lb.; merino, 35 a 40 cents.

STOCK MARKET.—Market quite dull. Shippers are paying $4 25 a$4 50, for large fat Cattle, other descriptions range from $3¼ to $4 per 100 lbs. Sales to shippers of good Hogs at 3½, to butchers at 4c. per lb. For Sheep shippers are paying $1 50 to $1 75 per head.

Idleness and good clothes destroy more young men in cities, than all other causes put together. But there is a lackadaisical sort of girls, called "young ladies," who are in a worse way that these same young fellows. While their fathers, honest laboring men, work early and late to make a living, and their mothers enslave themselves to keep them tidy, and cook their meals, these interesting young creatures are lolling about, terrified at nothing so much as the idea of earning the salt that seasons their food. You cannot induce them to do a little sewing by offering them double pay, lest they should be known to be "working girls!" and lose all chance for the fashionable world. Interesting but lazy creatures! doomed to helpless dependency through life, or to be dead weights to dubed husbands.

—o—

How to Cure a Cold.—Of all other means of killing colds, fasting is the most effectual. Let whoever has a cold eat nothing whatever for two days, and his cold will be gone, provided he is not confined in bed—because by taking no carbon into the system by food, but consuming that surplus which caused his disease by breath, he soon carries off his disease by removing the cause. And this plan of fasting will be found more effectual if he adds copious water drinking to protracted fasting. By the time a person able to be about, suffering however severely from a cold, has fasted one entire day and night, he will begin to experience a relief, a lightness, a freedom from pain, and a clearness of mind, in delightful contrast with that mental stupor and physical pain caused by colds. And how infinitely better is this method of breaking up colds and freeing the system of disease than medicines, especially than violent poisons.

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